

PD-ABN-114  
91034

## Volume I: Overview Report

EVALUATION OF

P.L. 480 TITLE II PROGRAM IN PERU, 1990-1995

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Submitted to:

**USAID/Peru**

under IQC No. AEP-0085-I-00-3002-09

*Delivery Order No. 35*



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In collaboration with and utilizing  
the results of field work performed by  
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**August 1996**

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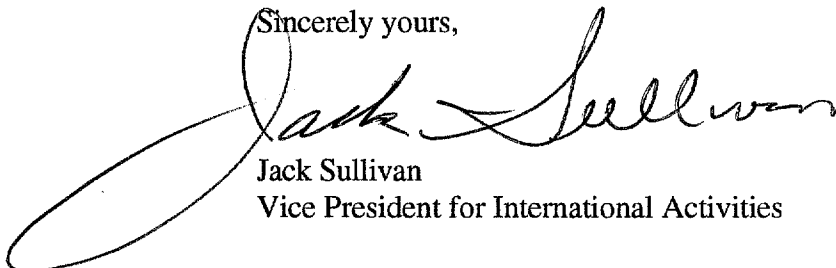
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**RE: Final Draft Report for Peru PL 480 Evaluation, Contract No. AEP-0085-I-35-3002**

To whom it may concern:

Enclosed please find two copies of the final draft report of the subject evaluation for you to distribute as needed.

Sincerely yours,



Jack Sullivan  
Vice President for International Activities

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## ACRONYMS

ADRA/OFASA	Relief and development agency of the Adventist Church
AER	Annual Estimate of Requirements
CARE	International PVO
CARITAS	Relief and development agency of the Catholic Church
CEI	Spanish acronym for Peruvian pre-school education centers
C.I.F.	Cost, insurance and freight
CIP	Spanish acronym for the International Potato Center
CMI	Spanish acronym for ADRA/OFASA's MCH program
CRS	Catholic Relief Services
CS	Cooperating Sponsor (agency implementing the Title II program)
C.S.B.	Corn soy blend
EDA	Spanish acronym for diarrheal diseases
DA	Development Associates, Inc. (the U.S. contractor for the evaluation)
DHS	Demographic and Health Survey
GDP	Gross Domestic Product
GOP	Government of Peru
HPN	Health, Population and Nutrition
IEC	Information, education, communications
IIN	Instituto de Investigacion Nutricional (the Peruvian contractor for the evaluation)
INAN	Instituto Nacional de Nutricion (Peruvian agency with the Ministry of Health)
IRA	Spanish acronym for acute respiratory infections
KAP	Knowledge, attitudes, practices
MCH	Maternal Child Health
MINSA	Spanish acronym for Ministry of Health
MOE	Ministry of Education
MOH	Ministry of Health
NBI	Spanish acronym for Basic Unsatisfied Needs
NGO	Nongovernmental organization
OPG	Operational Program Grant
ORS	Oral Rehydration Salts
PANFAR	Spanish acronym for MCH program carried out by PRISMA and the MOH
PHC	Primary Health Care
PIETBAF	Spanish acronym for the Peruvian agency dealing with family-based early childhood stimulation
PRISMA	Peruvian NGO

PRONAA	Spanish acronym for the Peruvian agency responsible for food distribution
PRONAMACHCS	Spanish acronym for the Peruvian agency in the Ministry of Agriculture responsible for soil conservation and land management
PRONOEI	Spanish acronym for the Peruvian agency in the Ministry of Education dealing with early childhood stimulation centers
PSI	Spanish acronym for CARITAS's child survival program
PVO	Private Voluntary Agency
UBES	Basic Health Units in the Peruvian health system
UDES	Departmental Health Units in the Peruvian health system
UNICEF	United Nations Children's Fund
U.S. or US	United States
USAID	U. S. Agency for International Development
USG	United States Government
UTES	Territorial Health Units in the Peruvian health system

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## EXECUTIVE SUMMARY

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Food assistance has been an important part of the U.S. economic assistance program to Peru since the 1950s, when the first program for Title II was developed. During the early 1990s Title II assistance accounted for over 70 percent of total food assistance and over 50 percent of total economic assistance. Averaging \$60 million annually, it was also one of the largest Title II country programs worldwide during the 1990 - 1995 period.

The Peru Title II program is complex with each of the four cooperating sponsors implementing a number of different types of programs in many parts of the country. The activities that are being evaluated fall into three general categories: (1) programs that provide food to the most nutritionally vulnerable groups (pregnant and lactating mothers and pre-school children); (2) programs that provide food to the poor in exchange for work (food for work), particularly for agricultural and rural development; and (3) programs that assist the poor in marginal urban areas that have joined together in a *comedor*.

The *comedor* (Spanish for kitchen) is both a kitchen for cooking meals for the families of the members of the comedor and an institution of solidarity and mutual support established by a group of women in a small geographic area to deal with poverty. The women take turns working in the kitchen to prepare collectively one solid meal (usually daily) for their families and other individuals, e.g., indigent members of the community. The members pay a small sum for the meals received.

These three categories of program intervention were selected for the evaluation because of their relative importance during the period and/or because of the relevance of the results of the evaluation to future programs (maternal child health and agricultural development programs). Micro-enterprise programs are not included in the evaluation because: 1) they were a small portion of the program; and 2) with the exception of micro-enterprise activities directly related to agricultural production, they are not consistent with the new Food Aid and Food Security Policy paper and will not be eligible for Title II support in the future.

### METHODOLOGY OF THE EVALUATION

The significant elements of the evaluation scope of work are included in Annex A. The overall objective of the evaluation is to determine whether the Title II program as a whole, as well as key programs implemented by the individual cooperating sponsors, has been effective in reducing food insecurity in Peru over this time period and to make recommendations on how the cooperating sponsors and USAID/Peru can enhance the impact of the Title II programs and sustain those impacts.

USAID/Peru contracted with two organizations to perform the evaluation: the Institute of Nutritional Research (Instituto de Investigacion Nutricional — IIN) of La Molina, Peru and Development Associates, Inc. (DA) of Arlington, Virginia, U.S.A. The IIN contracted personnel for three teams, one for each major program (maternal-child health, comedores, agricultural development), and support staff. DA provided three experts, one to work with each of the IIN teams. The DA team leader also had responsibility for the overall coordination of the effort; the IIN team leader planned and managed the field work. The IIN team was tasked to prepare detailed reports on the three program areas — Maternal Child Health (Volume II), Comedores (Volume III), and Agricultural Development (Volume IV); the DA team was to prepare an overview report (Volume I), with annexes for each program. The field work was carried out from March to May 1996. Draft reports were submitted by both contractors in June and were commented on by USAID (Peru and Washington). This revised Volume I reflects those comments and additional analysis by both the IIN and DA teams.

## PROGRAM SETTING

In 1980, Peru emerged from more than a decade of "military socialism" with a bloated bureaucracy and weak public institutions. Little progress was made during the 1980s in changing this situation. Concurrently, 1980 saw the appearance of the Shining Path, perhaps the most violent guerrilla movement ever to emerge in the Americas. Violence grew during the 1980s, when the movement became a serious threat to the Peruvian State, and did not subside markedly until about 1993, with the capture of top movement leaders. The violence disrupted work routines and patterns of life all over the country. By 1989, inflation reached 2,755 percent. Real wages fell by more than half. Economic growth declined by 20 percent between 1988 and 1989.

Alberto Fujimori assumed power in 1990 and shortly thereafter instituted "structural adjustment" measures to curb inflation and control the economy. In 1991, Gross Domestic Product (GDP) in real terms rose by 2.8 percent after three years of negative growth, but fell back in 1992 to the low 1990 level — even lower on a per capita basis. The reforms, however, left the economy, especially the industrial sector, in deep recession. Furthermore, there was no social program until 1993 to cushion the impact on the poor and the vulnerable. Indeed, poverty deepened in 1992 and 1993, possibly subsequently. While manufacturing production has risen somewhat, the 1955 level was still only 88 percent of 1987 production. In spite of these modest improvements, industrial employment has fallen every year since 1987 and was 25 percent lower in December 1995 than in 1990. There are other signs that the economy may have some further delays before it is able to start returning to anywhere near pre-crisis levels, that the adjustments necessary for recovery are still not over, and the economy is currently backsliding.

While the industrial sector has been having its problems, the agriculture sector has also suffered — particularly in the weather-sensitive Sierra. Besides the normal problems of drought, frost and hail, the Sierra has also been deeply affected by the security problems and by the international drug trade. Peru continues to be a desperately poor country, with the deepest poverty (as measured by the GOP's poverty index) found in the countryside, especially in the central and southern Sierra. With under-employment and unemployment estimated at 80 percent, the poor are located in all areas of the country. According to GOP estimates, 50 percent of the people live in poverty, 20 percent in extreme poverty.

Both international and domestic politics have impacted on those trying to implement the Title II program. At times, the U.S. Government was unwilling to work with the Peruvian government, and its assistance was limited to humanitarian assistance. Hence, there were no supporting programs available from either government. Domestic politicians have at times tried to control the distribution of food, particularly in the early part of the evaluation period (1990 in particular). The agencies have also had difficulty working with the GOP ministries even when there were no problems between the two governments because of numerous re-organizations and downsizing of government ministries and the frequent turn-over of personnel — both at the top and throughout the system.

The Food Security Strategy for Peru prepared by USAID/Peru in December 1994 reported that inadequate food supply has been a continuing problem in Peru. Calorie availability has been above 2,300 calories per capita only three or four times since 1961. In 1990-1992, calorie availability fell below 2,000 calories per person per day. While the problem of overall lack of food availability in Peru reflects low levels of agricultural productivity, drought, rural violence accompanied by abandonment of farms, and a scarcity of foreign exchange, the Strategy suggests that the most important reason for low availability is probably the low levels of effective demand for food on the part of Peru's poor. The Strategy also reported that food utilization was deficient. The Demographic and Health Survey of 1991-92 found 36.5 percent chronic malnutrition (stunting) in Peru, 10 percent undernutrition (or global malnutrition) and 1 percent acute malnutrition (wasting).

## PROGRAM IMPLEMENTATION

Four cooperating sponsors have implemented the Title II program in Peru during the evaluation period -- ADRA/OFASA (relief and development arm of the Adventist Church), CARE (an international PVO), CARITAS (relief and development arm of the Catholic Church) and PRISMA (a Peruvian NGO). During the evaluation



period (1990-1995), CARITAS brought in the largest amount of food for direct distribution (\$100 million; 36 percent of the total); CARE was second with \$89 million (32 percent). ADRA and PRISMA each distributed about 16 percent (See Table 1).

During the period 1990-1995, the Title II program financed the importation of \$360 million of commodities — an annual average of \$60 million compared to an average of \$18 million for the previous six years. Of this total, \$278 million was for direct distribution and \$82 million (23 percent) was for monetization.

**TABLE 1**  
**Value of Commodities Imported by Agencies, 1990-1995**  
(US\$ Million)

Agency\Monetization	1990	1991	1992	1993	1994	1995
<u>Direct Distribution</u>						
CARITAS	18.3	16.3	18.1	18.1	17.0	12.2
PRISMA	6.4	6.5	9.0	8.4	7.5	6.4
ADRA/OFASA	6.9	6.8	7.6	7.2	9.6	6.8
CARE	9.3	10.1	20.4	16.4	22.0	10.4
Sub-Total	40.9	39.7	55.1	50.1	56.2	35.7
CARE for Monetization for all Agencies	6.8	10.0	13.6	20.0	19.7	10.3
Total Title II Imports	47.7	49.7	68.7	70.1	75.9	46.0

The geographical distribution of beneficiaries on an annual basis is not available on a consistent basis from all of the agencies. It is clear from partial data, however, that the program has been shifting from the coastal area to the Sierra, as mandated by USAID, and somewhat to the selva (rainforest) in the last two years. The shift among the programs is shown in Table 2 below. The MCH and children's programs declined about one-third, the same as the total program; the comedor program has declined the most rapidly, the food for work (primarily agricultural and rural development) the least rapidly.

**TABLE 2**  
**Shift in Programs from 1992 to 1995**  
(thousands of beneficiaries)

PROGRAMS	1992 #	1992 % OF TOTAL	1995 #	1995 % OF TOTAL	% DECLINE 1992 TO 1995
MCH AND CHILDREN	895	36%	588	36%	33%
COMEDORES	684	28%	410	25%	40%
FOOD FOR WORK	891	36%	627	39%	30%
TOTAL	2,470	100%	1,625	100%	33%

Details on the agency programs and their implementation are provided in Annexes B, C, and D. Detailed information on the programs visited in the field during the evaluation is found in Volumes II, III and IV prepared by the IIN.

#### GENERAL ISSUES/ISSUES FOR THE FUTURE

The 1994 Food Security Strategy commissioned by USAID/Peru stressed the importance of access to food (not just food availability and food utilization) and recommended emphasizing activities designed to increase the productivity and incomes of the extremely poor who are concentrated primarily, but not exclusively, in the rural Sierra. The Strategy also recommended that the focus on income generation and enhanced productivity be complemented with nutrition programs for Peru's most vulnerable populations, especially poor pregnant and lactating mothers and children less than six years old. It recommended terminating assistance to the comedor program, which was largely concentrated in Lima.

The geographic and beneficiary priorities of the Strategy Paper are consistent with the new directions laid out in USAID's 1995 Food Aid and Food Security Policy paper, with the exception that the latter downplays the importance of using the Title II program to improve access to food by helping increase incomes of the poor — which was an emphasis of the Strategy Paper. The evaluation team concurs with the emphasis of the Strategy Paper on access to food (e.g., through income generation). The team feels that it was premature, in the case of Peru, for USAID/Washington to determine that there was sufficient opportunity from other programs to combat general poverty, and that some of the work of the agencies in promoting income-generating activities in conjunction with food distribution should be allowed to continue for a year or two longer than planned.

The team also concurs with the importance of continuing with the maternal-child health and nutrition activities, but not just because of the time lag in dealing with Peru's poverty problem. The nutrition and health messages are essential even if adequate food were available and accessible. The team is particularly concerned about the adequacy of current efforts with regard to the content of a proper diet and breastfeeding up to two years. One USAID/Washington officer feels that the lack of long-term breastfeeding, including exclusive breastfeeding for the first six months, may be a contributing factor to the stunting problem that is believed to be so prevalent in Peru, particularly in the Sierra. Whether or not this is true, it has been established that long-term breastfeeding is salutary to the health of both mother and infant.

All of the agencies have been following USAID guidance on moving from the coast to the Sierra and trying to improve their targeting in those areas. A number of issues/questions arise with regard to the targeting guidelines; these are set forth in Section VII. The issues relate to geographic concentration, but also to the types of programs that need to be given priority. They have implications for how the Title II program should be structured as it continues to phase down. It also points up the need for more research and more solid data on which to base operational decisions.

#### GENERAL CONCLUSIONS

1. USAID (Washington and Lima) and the four cooperating sponsors are to be commended for effectively carrying out a large and complicated Title II program during the period 1990 - 1995 under extremely difficult conditions: political and economic upheaval, insurgency, and attempted political interference to name the most serious. The agencies are also commended for responding to: a) the changes in policy that emanated from USAID/Washington which required extra planning and re-programming efforts at inopportune times; and b) the large number of audits and evaluations, frequently spaced closely together, which complicates program implementation.
2. As USAID and the agencies look to a gradual phase-down of food resources, the importance of the program messages that go with the food take on increasing importance, especially in health and nutrition and agricultural development. The evaluation team has made a number of suggestions to the agencies for ways to improve the message and its delivery.

3. USAID/Washington is to be commended for having approved a significant level of monetization of Title II food for support of the Peru program; CARE is to be commended for its implementation locally of the monetization. It is hoped that this monetization support will continue at a high level because the needs for it are apt to be greater as the agencies try to serve the poorer populations in the more remote areas of the Sierra and the selva.
4. USAID should be prepared to review its targeting policy for food aid in Peru, taking into account the observations in Section VII above and the Peruvian government's evolving strategy for dealing with poverty in the country.
5. Some carefully constructed research activities could be helpful to the USAID in strengthening the impact of its Title II program and in formulating a strategy for the phase-down of its program.

#### MATERNAL AND CHILD HEALTH PROGRAMS

1. All of the agencies are to be commended for their dedicated efforts to get food and nutritional and health messages to the most vulnerable members of society, children and pregnant and lactating mothers. PRISMA and CARITAS are especially cited because of their much larger programs and their efforts throughout the country, including in insecure areas. All agencies have gained invaluable experience in working with local communities, helping distribute health and nutrition messages, cooperating with government authorities at various levels, serving as the forerunners for a primary health care system.
2. As we move into a period of diminishing Title II food resources for distribution, the nutritional and health messages need to be given a much higher priority. Similarly, the training of local promoters (in the community) and Ministry of Health personnel becomes especially important. For that reason, the suggestions of the evaluation team for program improvement for the individual agencies have focused on the content of the nutritional and health messages and how they can be delivered more effectively.
3. An issue of concern is the level and type of growth monitoring activity in the field. Fortunately, the team was informed by USAID/W personnel that USAID's policy on growth monitoring is being changed to reflect the accumulated research findings; it is planned to restrict regular growth monitoring to weight for age; height would be measured at birth and at infrequent intervals (e.g., age 3, age 5), primarily for purposes of research.
4. All four agencies have spent time, effort and money on the development of nutrition and health education materials and training. Although the agencies have coordinated with the Ministry of Health in an effort to follow norms of child survival programs little coordination has taken place between agencies with regards to these matters. Thus, the messages are not always consistent.
5. Additional coordination is needed among the agencies and with USAID, especially with regards to time, efforts and money used in technical areas of the program — from the development of nutrition and health education strategies, to training methodologies and materials, to the implementation of information systems and commodity management.

#### COMEDOR PROGRAMS

1. The establishment of comedores is a unique way that Peruvian women have used for nearly 30 years to survive and maintain their families in times of crisis. They have provided an efficient and cost-effective way of distributing food to those in need in the urban slum areas.
2. Since the Peruvian governments during the first half of the evaluation period were unable or unwilling to provide an adequate safety net for the poor, the distribution of donated foods, such as that provided by USAID and distributed by CARITAS and CARE through the comedores, made a very significant

contribution to family nutrition and well-being. If actions in other countries by people faced with a crisis like that which existed in Peru is any guide, the large-scale assistance may also have contributed to political stability during the period.

3. Because of the serious underemployment and unemployment situation in Peru, the evaluation team believes that comedor support from some source may be needed for a longer period than now planned.

#### AGRICULTURAL DEVELOPMENT

1. Apart from the contribution of donated food itself to total family food supply in many impoverished Sierra communities, all of the projects have enjoyed some success in meeting the mandates of the Title II program in agriculture and rural development: (a) increased awareness of the need to practice soil conservation; (b) increased capacity of poor farmers to organize themselves, analyze their problems, and take decisions; and (c) recognition of the value of certain foods in the diet, especially in the diet of children.
2. All of the cooperating sponsors have some weaknesses in providing technologies appropriate for Sierra farmers. While the agencies can make some improvements in operations, these problems are part of a much larger one: **the Peruvian State does not have the capacity to address the agricultural problems of poor farmers of the Sierra.** It seems appropriate therefore that USAID (not just the Food for Development office) should work with the Peruvian government, as well as with the cooperating sponsors, to increase and make more effective the support given to the agencies in their agricultural development efforts in the Sierra.
3. Reaching the poorest of the poorest in the Peruvian Sierra (the current food security mandate) is a high-cost endeavor because the poor tend to be in the remotest, least accessible areas. It is expensive to transport the food to such areas, and costly to maintain secure warehouses in such areas (USAID is concerned with security of the food as well as with food security). Hence, two scenarios seem likely: 1) USAID and the agencies have to find new ways to deal with the problems, and increased food monetization will probably be necessary to support these new approaches; and/or 2) a decision will be made to forego trying to reach the most remote and concentrate on supporting the movement of people from the most remote areas to magnet urban centers as currently is being planned by the Office of the Presidencia.

#### RECOMMENDATIONS

- ▶ **USAID/Washington should review targeting guidelines for Peru, taking into account the discussion in Section VII above and/or recommend to USAID/Peru that it review with the agencies and the MOH the targeting policy for the Title II program, taking into account the Section VII issues.**
- ▶ **USAID/Washington should reconsider its position of not supporting income-generating activities as part of the Title II programs, at least in the case of Peru for the next two or three years.**
- ▶ **USAID/Washington should be prepared to support and USAID/Peru should arrange for some research activity in support of Title II targeting and implementation (see Section VII).**
- ▶ **USAID/Peru should coordinate an effort (workshop or other mechanism) with the MOH and agencies implementing Title II programs to review, revise and reach consensus on nutrition and health education messages for improved program impact.**
- ▶ **USAID/Peru should confirm with USAID/W that new guidelines on growth monitoring will be forthcoming soon. If they are not expected soon, USAID/Peru should coordinate an effort to address the appropriate anthropometric measures to be used in the Title II Program in Peru.**

- ▶ **USAID/Peru should improve the coordination between the Food for Development office and the Health, Population, and Nutrition office, especially in responding to the recommendations herein.**
- ▶ **USAID/Peru should foster appropriate steps to assess more completely the impact of the termination of USAID support to comedores and consider prolonging for another year or two its assistance to comedores, even if at a reduced level, and/or explore possible replacements for at least part of the reduction of USAID assistance to the comedors.**
- ▶ **CARITAS should: (a) check periodically with health centers in the poor areas where they operated comedores, or have operated, to determine if the centers are treating an increasing number of illnesses of children under six or of pregnant and lactating mothers; and (b) explore other means, possibly through the Mothers' Clubs or other communal organizations, to establish an early warning system of food deficiency/elevated health problems.**
- ▶ **USAID should work with the cooperating sponsors to develop a strategy to reach poor Sierra farmers with appropriate technologies. There are two broad parts to such a strategy: (1) the institution of a process to make technologies appropriate; and (2) the establishment of links to technology sources. As a first step to establishing these links, and to facilitating the sharing of experiences of the agencies with each other, USAID should sponsor a seminar-workshop, with GOP participation, in which each agency would discuss its methods, challenges, and problems regarding technology generation and extension.**
- ▶ **USAID should consider organizing a seminar-workshop, similar to the technology workshop, on agricultural credit, with special emphasis on rotating credit funds.**

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## I. INTRODUCTION

### A. BACKGROUND DESCRIPTION OF TITLE II IN PERU

Food assistance has been an important part of the U.S. economic assistance program to Peru since the 1950s, when the first program for Title II was developed. Title II accounted for over 50 percent of the total food resources provided to Peru between 1954 and 1989. During the early 1990s it accounted for over 70 percent of total food assistance and over 50 percent of total economic assistance. Averaging \$60 million annually, it was also one of the largest Title II country programs worldwide during the 1990-95 period.

The Peru Title II program is very complex with each of the four cooperating sponsors implementing a number of different types of programs in many parts of the country. The activities that are being evaluated fall into three general categories:

- ▶ Programs that provide food to the most nutritionally vulnerable groups (pregnant and lactating mothers and pre-school children) with the objective of improving their health and nutrition. Programs that fall under this category include Maternal Child Health (MCH) programs, Pre-School programs, and Other Child Feeding programs.
- ▶ Programs that provide food to the poor in exchange for work (food for work). The objective of these programs ranges from providing a temporary income supplement to creating productive infrastructure which can contribute to increased productivity and incomes of the beneficiaries over the medium to longer term. The infrastructure might include water and sanitation programs, green houses, irrigation canals, soil conservation structures and roads.
- ▶ Programs that assist the poor in marginal urban areas that have joined together in a *comedor*. Throughout this report the Spanish word, *comedor* (plural comedores), will be used instead of an English translation because the latter implies a totally different type of institution. For example, community kitchen, the usual translation, is likely to be interpreted as a soup kitchen which is set up by a church in its own premises to feed the homeless. Since *comedor* is literally "kitchen" in English, it is also used in some reports to refer to the institutional feeding of children or others. Neither usage is appropriate for the *comedor* element of the Title II program.

The *comedor* reviewed in this evaluation is both a kitchen for cooking meals for the families of the members of the *comedor* and an institution of solidarity and mutual support established by a group of women in a small geographic area to deal with poverty. As for the kitchen part, the women take turns working in the kitchen to prepare collectively one solid meal (usually daily) for their families and other individuals, e.g., indigent members of the community. The members pay a small sum for the meals received.

These three categories of program intervention were selected for the evaluation because of their relative importance during the period and/or because of the relevance of the results of the evaluation to future programs (maternal child health and agricultural development programs). Micro-enterprise programs are not included in the evaluation because: 1) they were a small portion of the program; and 2) with the exception of micro-enterprise activities directly related to agricultural production, they are not consistent with the new Food Aid and Food Security Policy paper and will not be eligible for Title II support in the future.

### B. METHODOLOGY OF THE EVALUATION

The significant elements of the scope of work for the evaluation are included in Annex A. The overall objective of the evaluation is to determine whether the Title II program as a whole, as well as key programs implemented by the individual cooperating sponsors, has been effective in reducing food insecurity in Peru over this time period

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and to make recommendations on how the cooperating sponsors and USAID/Peru can enhance the impact of the Title II programs and sustain those impacts.

USAID/Peru contracted with two organizations to perform the evaluation: the Institute of Nutritional Research (Instituto de Investigacion Nutricional — IIN) of La Molina, Peru and Development Associates, Inc. (DA) of Arlington, Virginia, U.S.A. The IIN contracted personnel for three teams, one for each major program (maternal-child health, comedores, agricultural development), and support staff. DA provided three experts, one to work with each of the IIN teams. The DA team leader also had responsibility for the overall coordination of the effort; the IIN team leader planned and managed the field work. The IIN team was tasked to prepare detailed reports on the three program areas in Spanish, with an English translation; the DA team was to prepare an overview report in English, with annexes for each program, drawing heavily upon the work of the IIN team.

The DA team came to Peru at the outset of the evaluation to become somewhat acquainted with Peru (a short visit to Ayacucho department) and to work with the Peruvian team to prepare a detailed work plan for approval of USAID/Peru. The teams reviewed reports of the Title II agencies and other documentation and then met with the agencies to discuss the sites to be visited. The teams prepared questionnaires and check lists for use in interviews with governmental and project personnel, local officials, and other interested and knowledgeable people. In addition, plans were made for holding focus group sessions with beneficiaries to obtain their view of program activities and to test their comprehension of health and nutrition education and/or agricultural technology messages being promoted by the different agency programs.

A joint general work plan, with draft outlines for the evaluation reports, was submitted to and approved by USAID/Peru and the DA team returned to the U.S. The IIN team subsequently submitted a more detailed work plan for the field work for USAID/Peru approval. More details on the methodology of the evaluation, including model questionnaires, sites visited, etc. are included as annexes to Volumes II, III and IV.

The DA team returned to Peru in April to review with the IIN team the results of the first field visits, offer suggestions as appropriate, and participate briefly in the IIN team's second round of field visits. The third visit of the DA team (last half of May) coincided with the completion of the field work, the writing of the field reports, and the analysis of the data collected. The latter involved organizing and processing focus group responses, information collected on the weight gain of children at various centers, the caloric value of various rations and the mothers' responses on knowledge, aptitude, and practices (KAP) relating to the health of their children. Concurrently, the DA and IIN teams met with the agencies to review the teams' findings and to obtain clarification and/or additional information as needed and then proceeded to prepare their draft reports.

The DA team prepared a draft report, based on a review of the preliminary draft material from IIN and extensive discussions with the teams, and submitted it to USAID/Peru on June 6, 1996. The following week, the IIN submitted to USAID individual reports on the three subject areas (maternal and child health, comedores, and agricultural development) as Volumes II, III and IV; the DA overview report is Volume I. Based on comments on the draft report from USAID/Peru and USAID/Washington and the more complete data available from IIN, this report has been prepared.

## II. PROGRAM SETTING

To understand the Peruvian milieu over the six-year period of this evaluation (1990-1995), it helps to reflect on the country's recent history. With the election of Fernando Belaunde to the presidency in 1980, Peru emerged from more than a decade of "military socialism" with a bloated bureaucracy and weak public institutions. Public capacity for agricultural research and extension had declined markedly, and some of the best technical talent had already left Peru. Belaunde tried to reverse the years of interventionism, but his agricultural policies subsidized food imports to keep urban food prices low and, in other ways, disfavored peasant farmers.

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Also appearing in 1980 was the Shining Path, perhaps the most violent guerrilla movement ever to emerge in the Americas. Violence grew during the 1980s, when the movement became a serious threat to the Peruvian State, and did not subside markedly until about 1993, with the capture of top movement leaders. The violence disrupted work routines and patterns of life all over the country, but more so in some areas than in others. The disruption was extreme in Ayacucho, home of the Shining Path. As a result, widowed women now head upwards of 30 percent of the households in some rural communities in Ayacucho.

Populist Alan Garcia became president in 1985, amid mounting economic turmoil and violence. Garcia tried to return to State economic intervention, and balked at servicing Peru's large foreign debt, thus alienating international lenders and further isolating the country. Inflation reached 2,755% in 1989, and real wages fell by more than half. Economic growth declined by 20% between 1988 and 1989.

Alberto Fujimori assumed power in 1990. Spurred by the International Monetary Fund and international lenders, Fujimori instituted "structural adjustment" measures to curb inflation and control the economy. These measures called for privatization and free markets, and above all for a massive removal of the State from the economy. In 1991, Gross Domestic Product (GDP) in real terms rose by 2.8 percent after three years of negative growth, but fell back in 1992 to the low 1990 level — even lower on a per capita basis. With inflation cut to 55 percent per year in 1992 (the lowest in 15 years), the World Bank again authorizing loans to Peru, and some inflow of private investment, the way was paved for growth in GDP in 1993 and 1994 (data have not been published for 1995).

The reforms, however, left the economy, especially the industrial sector, in deep recession. Furthermore, there was no social program until 1993 to cushion the impact on the poor and the vulnerable. Indeed, poverty deepened in 1992 and 1993, possibly subsequently. While manufacturing production rose about 33 percent between 1990 and December 1995, the latter level was still only 88 percent of 1987 production. In spite of the increase in manufacturing production, industrial employment has fallen every year since 1987 and was 25 percent lower in December 1995 than in 1990. The decline in industrial employment in 1995 was 2.6 percent, greater than the decline in 1994.

There are other signs that the economy may have some further delays before it is able to start returning to anywhere near pre-crisis levels, that the adjustments necessary for recovery are still not over, and the economy is currently backsliding:

"Installed industrial capacity in April 1996 was 56.1 percent, down from last year of 59.7 percent; the January-April average of 57.5 percent is also below last year." *El Comercio*, May 26, 1996

"During the first trimester of this year, the economy in real terms contracted 2.5 percent." *El Comercio*, May 21, 1996

"...the Peruvian government has decided to put a brake on the rhythm of economic growth in recent months." *El Comercio*, May 21, 1996

"24 state enterprises are slated for liquidation." *El Comercio*, May 28, 1996

"unemployment and under-employment are about 80 percent of the active population." *El Comercio*, May 28, 1996

While the industrial sector has been having its problems, the agriculture sector has also suffered — particularly in the weather-sensitive Sierra. Besides the normal problems of drought, frost and hail, the Sierra has also been deeply affected by the security problems and by the international drug trade. An agricultural census in 1969 showed 18,000 hectares of coca, a crop cultivated since pre-Inca times in the moist river valleys along the lower slopes of the eastern range of the Andes. Drug traffickers and the Shining Path, often the same, have dominated the coca-rich Huallaga Valley.



Coca production rose sharply toward 1987 and, since 1990, has spread from the Huallaga valley to other valleys in response to increased world demand for cocaine and in response to the continuing destitute plight of Sierra peasants pressed by poverty, too little land, and frequent drought. By 1990, Peru produced 60 percent of world coca. In 1992 129,000 hectares of coca were being planted (U.S. government estimate); by 1995, it was still at a level of over 115,000 hectares.

A large number of the peasants from the regions where the Title II agricultural work has become focused have for many years formed an eastward-moving migrant stream, some looking for new homes, others looking for temporary work and income. Many farmers interviewed for this evaluation had worked coca in the eastern valleys. Because coca prices have fallen sharply in the past several months, many peasants are now returning to the uplands (or going to the coast). Some of them had planted only coca and now were without food, as destitute as ever.

Peru continues to be a desperately poor country, with the deepest poverty (as measured by the GOP's poverty index) found in the countryside, especially in the central and southern Sierra. With under-employment and unemployment estimated at 80 percent, the poor are located in all areas of the country. According to GOP estimates, 50 percent of the people live in poverty, 20 percent in extreme poverty.

Both international and domestic politics have impacted on those trying to implement the Title II program. At times, the U.S. Government was unwilling to work with the Peruvian government, and its assistance was limited to humanitarian assistance. Hence, there were no supporting programs available from either government. Domestic politicians have at times tried to control the distribution of food, particularly in the early part of the evaluation period (1990 in particular). Government-distributed food has increased substantially during pre-election periods and dropped off drastically afterwards, creating difficulty for the Title II agencies in their distribution efforts.

The agencies have also had difficulty working with the GOP ministries even when there were no problems between the two governments. This reflected the numerous re-organizations of government ministries, coupled with the general down-sizing of the public sector, and the frequent turn-over of personnel — both at the top and throughout the system.

### III. PERU'S FOOD SECURITY PROBLEM

Food security is defined as "access by all people at all times to enough food for an active and healthy life." Food security encompasses three dimensions: availability, access, and utilization. **Availability** for rural Peruvians depends primarily on whether they are able to produce adequate amounts of food, while availability in the market is the essential element for urban dwellers. The latter depends on the adequacy of domestic production and/or imports of food and the proper functioning of markets. **Access** refers to the capability of the individual household to produce and/or buy the food necessary for an adequate diet for the family. **Utilization** refers to the ability of the individual to absorb and utilize the nutrients available in the foods in the diet. Improper food utilization is the result of personal tastes, culture, peer pressures, lack of knowledge, inadequate household processing and storage, inadequate food labeling, misleading advertising, and lack of access to or utilization of health, water, and sanitation services.

The Food Security Strategy for Peru prepared by USAID/Peru in December 1994 reported that inadequate food supply has been a continuing problem in Peru. Calorie availability has been above 2,300 calories per capita only three or four times since 1961. In 1983-1985 and 1990-1992, calorie availability fell below 2,000 calories per person per day. While the problem of overall lack of food availability in Peru reflects low levels of agricultural productivity, drought, rural violence accompanied by abandonment of farms, and a scarcity of foreign exchange, the Strategy suggests that the most important reason for low availability is probably the low levels of effective demand for food on the part of Peru's poor.

The Strategy also reported that food utilization was also deficient. It reported the information from the Demographic and Health Survey of 1991-92 on Peru: 36.5 percent chronic malnutrition (stunting), 10 percent undernutrition (or global malnutrition) and 1 percent acute malnutrition (wasting). The Strategy points to the low rate of acute malnutrition as an indication that lack of food is not a major problem nationwide — although it obviously is for those affected because they are at high risk of dying during episodes of wasting.

The Strategy concluded that lack of access to food was the root cause of food insecurity in Peru, i.e., Peru's food insecurity is more than anything else a question of poverty. If poverty can be alleviated, the Strategy expects that lack of availability and poor utilization can be addressed as well. Thus, the Strategy attached highest priority to bringing about sustainable increases in the incomes of Peru's poor.

Because poverty alleviation is a medium to long-run phenomenon, large numbers of Peruvians will continue to be malnourished or at nutritional risk in the short to medium term. Substantial numbers of young children will continue to be vulnerable to irreversible physiological damage unless measures are taken to enable them to benefit from whatever food is available. Hence, the strategy called for the primary focus of income generation for the poor to be complemented by a focus on utilization, especially among the most nutritionally vulnerable population: children under three years of age which are currently malnourished or at high nutritional risk.

The Strategy further concluded that the root cause of poverty in Peru is low labor productivity, which reflects inadequate investment in human and material capital and poorly developed public policies and institutions. From a food security perspective, priority should be given to policies and program actions that raise the productivity of currently poor people — and tilt the pattern of Peru's economic growth more toward labor-intensity.

The Strategy recommended that the P. L. 480 program limit projects to income generation and tightly targeted nutrition programs that are likely to result in demonstrable impacts for extremely poor households.

#### **IV. IMPLEMENTATION OF THE TITLE II PROGRAM**

Several major changes were made in the Title II program in the latter part of the 1980s as USAID/Peru and the PVO community tried to define better the nature of the problems that were being addressed with Title II food. One major change was to target the programs more to the rural poor and to activities designed to help them deal with the fundamental reasons for their poverty. This was in response to studies that indicated that the best-off of the rural poor were living in conditions worse than the neediest of the urban poor. The second major change was to redirect resources from school feeding programs to those focused on pregnant and lactating mothers and children under six years of age. This change was in response to research studies which identified these groups as the most vulnerable from a nutritional point of view.

Progress in focussing the program more on chronic food insecurity problems in the country was slowed as USAID/Peru and the Title II agencies found it necessary to respond to the effects of the economic crisis beginning in the late 1980s and the shock of economic reforms introduced in 1991. The amount of Title II resources was increased substantially and used to provide a safety net for those people most heavily affected by the economic crisis. With the stabilization of the economic and political situation in the country, and with a resumption of economic growth in the economy as a whole in 1993, attention again shifted to the continuing problem of chronic food insecurity, especially in the rural areas in the Sierra. The agencies were requested to shift programs from the coastal areas to the high Sierra and somewhat to the selva (tropical rainforest area) and from the comedor program to the maternal-child health and agricultural production programs.

Four cooperating sponsors have implemented the Title II program in Peru during the evaluation period — ADRA/OFASA, CARE, CARITAS and PRISMA.

- ▶ **ADRA/OFASA** is the Relief and Development Agency of the Adventist Church in the United States. ADRA provides support to a large number of projects, distributing food through a network of regional and zonal offices. Among its priorities are orienting its food aid to selected health and nutrition interventions directed to pregnant and lactating women and children under six years of age; promotion of greater agricultural productivity through agricultural credit, technical assistance and tools to farmers with below average yields; the establishment of micro-enterprises; and the support of agricultural-related and other productive community infrastructure activities.
- ▶ **CARITAS** runs the largest program both in terms of resources utilized and beneficiaries reached. The program is decentralized and operates through the dioceses of the Catholic Church which cover the entire country. Child survival is a major focus of the CARITAS Title II program. CARITAS also uses food to support a wide range of activities related to improving food production and productivity and to the promotion of income generating activities. It has been a major provider of assistance to the comedores.
- ▶ **CARE** in Peru is a developmentally oriented PVO that works through community and GOP organizations. The largest percentage of CARE's resources is provided to comedores. As the overall economic situation has begun to improve in the country, CARE has added other components designed to assist the members of these comedores develop small-scale enterprises and other income producing activities. CARE also implements a soil conservation program in selected communities in the highlands which combines improved soil conservation practices with the development of communal nurseries to protect natural resources and recuperate scarce arable land.
- ▶ The Asociacion Beneficia **PRISMA** is a Peruvian PVO created in 1986 which specializes in information systems, nutrition and health. The organization currently works as a technical counterpart to the Ministry of Health assisting it with the distribution of Title II foods and with the integration of these foods into the maternal and child care interventions that it carries out in local health establishments. The PANFAR program, which is PRISMA's major program, is designed to improve the nutritional status of mothers and children (0-59 months) in families that are identified as being at high risk of malnutrition. The Kusiayllu program targets the acutely malnourished under the age of three. PRISMA also distributes food to pre-school institutions.

During the period 1990-1995, the Title II program financed the importation of \$360 million of commodities — an annual average of \$60 million compared to an average of \$18 million for the previous six years. Of this total, \$278 million was for direct distribution and \$82 million was for monetization. The amount monetized averaged 23 percent, rising from 14 percent in 1990 to 28 percent in 1993 and then falling to 22 percent in 1995. The value of food imports by year by agency for direct distribution and for monetization is shown in Table III-1.

CARITAS brought in the largest amount of food for direct distribution (\$100 million; 36 percent of the total); CARE was second with \$89 million (32 percent). ADRA and PRISMA each distributed about 16 percent.

TABLE III-1

**Value of Commodities Imported by Agencies, 1990-1995**  
(US\$ Million)

Agency\Monetization	1990	1991	1992	1993	1994	1995
<u>Direct Distribution</u>						
CARITAS	18.3	16.3	18.1	18.1	17.0	12.2
PRISMA	6.4	6.5	9.0	8.4	7.5	6.4
ADRA/OFASA	6.9	6.8	7.6	7.2	9.6	6.8
CARE	9.3	10.1	20.4	16.4	22.0	10.4
Sub-Total	40.9	39.7	55.1	50.1	56.2	35.7
CARE for Monetization for all Agencies	6.8	10.0	13.6	20.0	19.7	10.3
Total Title II Imports	47.7	49.7	68.7	70.1	75.9	46.0

NOTE: Totals may not add exactly due to rounding.

SOURCE: USAID Program Summaries

The funds from the monetization of food commodities were distributed to the cooperating sponsors (CSs or agencies) to fund in-country transportation and storage costs of the Title II food as well as administrative and program costs of implementing the activities in which food was distributed. The distribution by agency approximated the distribution of commodities, with CARITAS receiving 34 percent of the funds, CARE 24 percent and the other two agencies each receiving 19 percent. A summary of the use of the monetized funds by purpose by agency is shown in Table III-2 below.

TABLE III-2

**Summary of Use of Monetized Funds by Agency, 1990-1995**  
(\$ 1,000)

USE OF FUNDS	ADRA	CARE	CARITAS	PRISMA	TOTAL	% OF SUB-TOTAL
Food Handling	1,629	1,498	6,581	3,623	13,331	19%
Administrative	8,841	11,574	3,896	5,524	29,835	42%
Program Operations	1,939	5,577	*11,453	3,867	22,836	32%
Capital Investment	518	592	851	684	2,645	4%
In-country Food Purchases	—	135	1,648	—	1,783	2%
Overhead	454	—	—	—	454	1%
Sub-Total	13,381	19,376	24,429	13,698	70,884	
As % of Total	19%	27%	34%	19%	100%	100%
Monetization Costs	6	1,896	25	39	1,966	
TOTAL	13,387	21,272	24,454	13,737	72,850	

SOURCE: Annual Monetization Reports by Auditor

\* Includes funds transferred to dioceses, some of which probably should be allocated as administrative; some funds would also have been used for local delivery of Title II food.

Twelve commodities have been imported under the Title II program; the principal ones were wheat flour, rice, bulgur, vegetable oil and corn soy blend (C.S.B.). The largest imports took place in 1992, 1993, and 1994. The tonnage of commodities for direct distribution fell by only nine percent in 1995, but the value of those imports was more than one-third less than the 1994 imports. This reflected the decline in price for some commodities and changes in the commodity mix by USAID/Washington. These factors also show up in the import of wheat for monetization: the tonnage imported increased by 68 percent over 1994, but the funds obtained from monetization was nearly half of that obtained in 1994. The quantities of the commodities imported during the period for direct distribution and for monetization are shown in Table III-3 below.

TABLE III-3

**Commodities Imported Under the Title II Program**  
(Thousands of Metric Tons)

Commodity	1990	1991	1992	1993	1994	1995	TOTAL
<u>Direct Distr.</u>							
Wheat Flour	43.9	28.2	32.1	31.1	29.9	76.5	241.7
Rice	7.8	34.2	46.9	20.6	44.5	11.7	165.7
CSB	13.1	15.1	15.6	15.4	14.6	11.4	85.2
ICSMF	5.6	7.5	7.4	6.0	6.6	5.0	38.1
Bulgur	16.4	18.4	20.2	26.8	20.9	18.1	120.8
Lentils	5.7	2.3	10.4	6.2	5.2	3.0	32.8
Peas	2.5	5.5	—	1.3	5.4	3.7	18.4
Vegetable Oil	5.8	6.7	8.0	39.0	20.5	6.8	86.8
Cornmeal	2.3	3.4	5.1	2.4	2.3	1.4	16.9
Beans	—	1.6	5.1	2.9	2.0	1.2	12.8
NFDM	—	—	0.7	—	—	—	0.7
Sub-totals	103.1	122.9	151.5	151.7	151.9	138.8	819.9
<u>Monetization</u>							
Wheat Flour	18.0		6.0				24.0
Rice		24.0			24.0		48.0
Vegetable Oil			20.0	30.0	10.0		60.0
Wheat (grain)						57.0	57.0
Sub-totals	18.0	24.0	26.0	30.0	34.0	57.0	189.0
<b>TOTALS</b>	<b>121.1</b>	<b>146.9</b>	<b>177.5</b>	<b>181.7</b>	<b>185.9</b>	<b>195.8</b>	<b>1008.9</b>

SOURCE: USAID Program Summaries

The food for direct distribution went to an average of two million annually during the period. On average, over 40 percent of the intended beneficiaries were children. The numbers of beneficiaries by year by category is shown in Table III-4 below.

TABLE III-4

**Numbers of Beneficiaries by Category**  
(in thousands)

Category	1990	1991	1992	1993	1994	1995
Pregnant & Lactating Mothers	125	163	193	172	163	129
Children under 6	660	948	1,025	925	865	688
Others	698	1,093	1,244	1,095	984	808
<b>TOTALS</b>	<b>1,483</b>	<b>2,204</b>	<b>2,462</b>	<b>2,192</b>	<b>2,012</b>	<b>1,625</b>

SOURCE: Derived from Annual Estimates of Requirements (AERs), as amended, and adjusted to account for young children that are included in comedor data and food for work dependents.

The geographical distribution of beneficiaries on an annual basis is not available on a consistent basis from all of the agencies. It is clear, however, from partial data that the program has been shifting from the coastal area to the Sierra, and somewhat to the selva in the last two years. The shift among the programs is shown in Table III-5 below. The MCH and children's programs declined about one-third, the same as the total program; the comedor program has declined the most rapidly, the food for work (primarily agricultural and rural development) the least rapidly.

TABLE III-5

**Shift in Programs from 1992 to 1995**  
(thousands of beneficiaries)

PROGRAMS	1992 #	1992 % OF TOTAL	1995 #	1995 % OF TOTAL	% DECLINE 1992 TO 1995
MCH AND CHILDREN	895	36%	588	36%	33%
COMEDORES	684	28%	410	25%	40%
FOOD FOR WORK	891	36%	627	39%	30%
<b>TOTAL</b>	<b>2,470</b>	<b>100%</b>	<b>1,625</b>	<b>100%</b>	<b>33%</b>

SOURCE: Derived from AER data, calculated by DA team.

The beneficiaries by program by year by agency are presented in Table III-6.

Details on the agency programs and their implementation are provided in Annexes B, C, and D. Detailed information on the programs visited in the field during the evaluation is found in Volumes II, III and IV prepared by the IIN.

TABLE III-6

**Numbers of Beneficiaries by Program by Agency**  
(in thousands)

PROGRAMS	1990	1991	1992	1993	1994	1995
<u>Maternal Child Health — Mothers</u>						
ADRA/OFASA	31	29	29	11	11	12
CARITAS	10	41	51	51	42	34
PRISMA	84	93	113	110	110	83
Sub-Total	125	163	193	172	163	129
<u>MCH — Children</u>						
ADRA/OFASA						
CARITAS	—	—	—	18	22	24
PRISMA	20	82	102	102	84	68
Sub-Total	169	185	227	220	220	165
<u>Pre-School Children</u>		267	329	340	326	257
CARITAS	189	30				
PRISMA	—					
Sub-Total	234	234	38	38	32	20
<u>Other Child Feeding</u>			259	185	148	114
ADRA/OFASA	234	264	297	223	180	134
CARE (Special Groups)	10	14				
CARITAS	—	59				
Sub-Total	29	30	14	15	14	12
<u>Comedors</u>			24	25	30	28
ADRA/OFASA	39	103	38	38	34	28
CARE	—	—	76	78	78	68
CARITAS	224	462				
Sub-Total	162	206				
<u>Food for Work — Workers</u>			14	—	—	—
ADRA/OFASA	386	668	403	381	336	252
CARE	30	30	259	259	225	158
CARITAS	26	24	676	640	561	410
Sub-Total	46	94				
<u>Food for Work — Dependents</u>	102	148				
ADRA/OFASA	120	121	74	52	35	34
CARE	106	96	24	15	17	18
CARITAS	182	374	76	76	86	70
Sub-Total			174	143	138	122
<b>TOTALS</b>	408	591				
ADRA/OFASA	191	194				
CARE	356	641	297	217	140	136
CARITAS	449	857	116	75	84	89
PRISMA	487	512	304	304	342	280
GRAND TOTAL	1,483	2,204	717	596	566	505
			435	313	222	218
			567	496	467	387
			869	868	845	658
			599	515	478	362
			2,462	2,192	2,012	1,625

SOURCE: AERs, with some adjustments to fit in some different categories.

## V. EFFECTIVENESS AND EFFICIENCY OF THE PROGRAM

The cost of distributed food per beneficiary fluctuates from year to year for the individual agency, reflecting changes in the price and/or the mix of commodities chosen. Taking an average over the six-year period, the cost of donated food per beneficiary for the different agencies was as follows:

ADRA/OFASA	\$31
CARE	31
CARITAS	23
PRISMA	15

The lower PRISMA figures reflect the smaller rations, and to some extent the mix of commodities in its feeding programs which are mostly for small children and infants. CARITAS also has fed more children than CARE or ADRA/OFASA. ADRA/OFASA's rations are generally the largest offered.

If one adds to the cost of the food the Title II monetization expenditures of the agency, all the costs go up, but the relationships stay about the same:

ADRA/OFASA	\$39
CARE	38
CARITAS	29
PRISMA	20

During the governmental crises in 1989 and 1990, monetization began because it was not feasible to obtain contributions from the central government. This changed in 1993 when Title III proceeds, which legally belong to the GOP, were made available to the agencies. Nevertheless, Title II monetization has continued to be very important to the agencies in improving the effectiveness and efficiency of their operations, particularly as they began to shift to less accessible areas. Title II monetization funds finance internal shipping and warehousing costs, program supervision, and general program administration. Smaller amounts have been used to procure equipment and to finance training activities.

It should be noted that under the current monetization procedure the Peruvian government indirectly provides a contribution to the internal costs of the Title II program. It forgoes collecting the taxes and other charges that the importer pays for the imported Title II food, allowing it to go into the monetization account. This contribution is worth 25 to 30 percent of the CIF value of the commodities.

The evaluation team attempted to make various comparisons between the budget expenditures of the four agencies. Unfortunately, executed budgets were not received from all agencies, and the categories used vary between agencies. The sources of funding have varied over the period, and the levels of the budgets appear to reflect primarily the availability of various sources of funds. The Title II monetization data for all agencies was taken from the official accounting firm's report for the year; the data reported by the agencies in other budget documents sometimes differed from the accounting firm's report.

After analyzing the data available for the period, the team has compiled some comparative data for 1994-1995. The data for these years appear to be the most reliable and most comparable. Even so, the CARITAS data, other than Title II monetization expenditures, are based on budget estimates.

The average food handling (transportation, storage) costs for the two years 1994 and 1995 per beneficiary (including GOP contributions where included in the budget, e.g., PRISMA and CARE, but excluding community contributions, e.g., in ADRA and CARITAS) were as follows:

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ADRA/OFASA	\$3.47
CARE	1.96
CARITAS	3.34
PRISMA	6.46

The bulk of the project administration costs have been funded from Title II monetization funds, but Title III generations have become important in 1994 and 1995 (in 1993 for some agencies). The project administration costs, including government contributions, per beneficiary averaged as follows for the two years 1994 and 1995:

ADRA/OFASA	\$12.66
CARE	8.58
CARITAS	1.37
PRISMA	3.69

The low CARITAS figure reflects the de-centralized manner in which the program is administered, i.e., there are project administration costs covered by the dioceses that are not reflected in the CARITAS budget. The dioceses obtain funding from various sources to help cover their individual budgets. The lower PRISMA figure probably reflects the fact that the MOH provides some of project supervisory personnel and their costs are not included in the PRISMA budget.

The project operations costs per beneficiary for ADRA/OFASA and CARE increased substantially in 1994 and 1995, modestly for PRISMA. The availability of Title III funding has been largely responsible, but other GOP contributions have increased the rate for CARE. The average costs for program operations per beneficiary for the two years are shown below:

ADRA/OFASA	\$10.38
CARE	11.09
CARITAS	3.92
PRISMA	4.47

The higher costs for ADRA/OFASA and CARE reflect, in part, the kind of projects being carried out (e.g., rural projects needing a variety of inputs), the projects' geographic dispersal, and the higher level of training provided. Also, a number of their activities utilize revolving funds which have been funded through the agencies' budgets.

Although GOP contributions were not sought in the beginning of the evaluation period because of special bilateral political problems, the end of the evaluation period saw a high level of bilateral cooperation. This was reflected by significant Title III contributions to the Title II programs and contributions from individual GOP agencies to the Title II activities, particularly from the ministries of health and agriculture. The sources of program funding for the four agencies (cooperating sponsors) is shown in Table III-7 below.

TABLE III-7

**Sources of Funding for Cooperating Sponsors' Program Budgets  
(Percent)**

Cooperating Sponsor		1994			1995	
	GOP	USG	CS	GOP	USG	CS
ADRA/OFASA	46%	47%	7%	34%	58%	8%
CARE	57%	39%	4%	51%	42%	7%
CARITAS	26%	61%	13%	15%	77%	8%
PRISMA	54%	46%	*	46%	52%	2%
TOTAL OF ALL CSs	46%	48%	6%	37%	57%	6%

NOTES:      GOP = Title III + government agencies      USG = Title II + Farm Bill + OPG  
                  CS = Cooperating Sponsor + Containers + Dioceses (CARITAS) + Apple grant (CARE)  
                  \* = Less than 1/2 percent

The technical assistance provided for program support and training varies by agency and by program. This is discussed in the individual program annexes and in more detail in Volumes II, III and IV prepared by the IIN. In general, the evaluation team felt that CARITAS and ADRA/OFASA needed to try and provide additional technical back-stopping for their projects.

Most of the agencies are using community promoters in their programs, which the evaluation applauds. It was felt, however, that in some cases the programs need to devote more efforts to strengthening and utilizing more the resources of the community (such as promoters, Mothers' Clubs and other community organizations). This would enhance the possibilities of sustaining the use of the technology being transferred.

The evaluation team has made a number of suggestions to the agencies for improving the quality and delivery of nutrition and health education messages. As the availability of food declines, the modalities used to pass on the technology become increasingly important — the training has to be carried out as a joyful activity or the recipients have to be already aware of the technology and anxious to have it presented to them.

Supervision, planning and administration of the programs are discussed in the individual annexes and the other volumes. In general, the agencies have been increasing their capabilities for planning. Some local level supervisors could use some training, so that they would use supervisory visits to provide technical assistance and give positive feedback to local promoters. In some cases, local supervisors also need the flexibility to respond to the community's felt needs for advice on specific subjects.

The monitoring and evaluation systems of the agencies vary considerably. CARE and PRISMA seem to have been the most vigorous in carrying out and making use of evaluations. Both CARITAS and ADRA/OFASA, however, are moving to reinforce their systems. It was very difficult, sometimes impossible, for the evaluation team to obtain comparable data that would permit it to do some of the calculations that were called for in the scope of work for the evaluation. In some cases, it was a matter of not having data for the entire period, reflecting the fact that the agencies have been re-vamping and improving their information systems.

Given our experience, we can understand USAID's desire to impose on the agencies an information system that would provide comparable data of value to USAID. On the other hand, we also found that the systems existing in the field are still complicated and cumbersome in a number of cases. We also are sympathetic to the agencies' concerns that they are being asked to collect data that they do not feel they need and/or they will be required to

enter data into two systems just so they can accommodate USAID. It appears that KIS (keep it simple) should be the order of the day for the contractor — and the agencies as they review the situations in the field. Unless those gathering and inputting the data see some use for the data, particularly for themselves or their unit, the quality of the data will deteriorate fairly quickly unless there is extremely close supervision of the data recording and inputting processes.

## PROGRAM COORDINATION

To promote coordination and achieve greater efficiency in the Title II program, USAID/Peru holds a weekly meeting with the agencies. During the evaluation period, USAID/Peru organized a number of meetings and workshops, e.g., 1) beneficiary targeting and appropriate food rations in June 1993; 2) a review of all Title II interventions, also in 1993; 3) improved planning and monitoring and use of the Logical Framework in early 1994; and 4) re-focussing program activities in light of revised USAID Food Security policies in late 1994.

In addition, the agencies often coordinate activities at the local level with local authorities, regional offices of GOP ministries, and other NGOs. CARE and ADRA/OFASA, in particular, have made agreements at virtually all levels — e.g. from the ministries to regional offices to local offices and communities. Regional CARITAS offices and dioceses also make arrangements and agreements at the local levels.

Nevertheless, the evaluation team felt that the programs could be strengthened by additional program coordination and interaction, particularly in relation to technical and technological issues that arise in program implementation. Possible action by the individual agencies is discussed in Annexes B and D.

In addition, the team sees the need for some additional interaction within USAID. The team felt that the health and agriculture offices might be able to take some initiatives that would support the efforts of the agencies, e.g., in working with the relevant ministries. In addition, the team has recommended that USAID promote some inter-agency meetings with relevant ministries to discuss specific topics such as appropriate agricultural technology and credit for the Sierra, nutrition and health education messages and methods of delivering the messages, and the role of measurement in the identifying and treating of malnourished children. These are discussed in the conclusions about the individual programs and in the annexes.

Another coordination issue is only now becoming apparent, i.e., with the Office of the Presidency as it moves to establish a strategy for its fight against poverty in the country. USAID-financed technical assistance is being provided to that effort. Some of the activities directly relate to programs Title II has been supporting, e.g., the comedor program. If a regional development strategy is established, this could impact on how USAID would want to structure its Title II program, particularly in the Sierra.

## VI. PROGRAM IMPACT AND SUSTAINABILITY

Probably the most significant impact of the Title II food program is reflected in what did not happen. Given the magnitude of the food inadequacy during the period, one would have expected widespread malnutrition, probably an increase in infant mortality, and social unrest. While the Peruvians have had to learn to cope with adversity off and on over the last 30 years, none of the previous crises were so severe and long-lasting as this one, especially from 1988 to 1993. The Title II program was very important to family nutrition and well-being during this period. If actions in other countries by people faced with a crisis like that which existed here in Peru is any guide, the large-scale assistance may also have contributed to political stability during the period, particularly in Lima.

Unfortunately, there are not reliable health data available that could be used to test the thesis that malnutrition would have been much higher without the assistance. One study, however, does provide an indication. An IIN study in 1991 compared data on moderate malnutrition in children under three for two departmental capitals

(Cajamarca and Piura) and Lima for the years 1984 and 1991. In the departmental capitals, the malnutrition rate had doubled, while it had remained relatively flat in Lima. This probably reflects in part the impact of the large number of comedores and "ollas comunes" that sprung up in Lima beginning in 1989. In the early 1990s the Title II program was providing a high level of support to the comedores in Lima, along with some other donors.

During its field visits, the MCH team reviewed the records of a number of children participating in Title II supported programs. In all of the sites, which involved all of the programs being supported by the Title II agencies, about 80 percent of the children were showing weight gains. Presumably this reflects both the food being distributed and the nutrition and health messages being offered with the food. More detailed information is found in Volume II.

Aside from the contribution of the donated food, the agricultural projects have also increased the awareness of the beneficiaries of the need to practice soil conservation. The projects have also increased the capacity of poor farmers to organize themselves, analyze their problems, and take decisions. People are becoming more aware of the importance of growing certain kind of crops, e.g., vegetables and Andean grains, for improving their diet. This is elaborated more in Annex D and Volume IV.

Although they are not strictly impact data, the agencies do have records of a number of physical accomplishments. These have been collected by the evaluation team and are included in Volumes II-IV; some are also included as attachments to Annexes B and D.

The team is aware of the criticism that has been levied on USAID to provide data to prove that the Title II program really makes a difference. While better proxy indicators can probably be found, it is unrealistic to think that data can be found to demonstrate what the auditors would like. The government information systems, particularly in health and nutrition — which is the crucial one in this case — are not sufficiently reliable to prove or disprove anything.

An added problem in demonstrating impact is being able to eliminate the effects of other programs or activities. For example, because of the cholera outbreak in 1991, the GOP went all out with certain messages, e.g., the importance of potable water and vaccinations. Thus, the evaluation team found greater knowledge and application of those messages than of other nutritional and health messages. Nevertheless, in some areas in the Sierra, there are no activities comparable to those of the Title II program. These cases have been noted in the IIN write-ups of the field visits, particularly in Volume IV.

The evaluation team looked for possible disincentives or other negative impacts of the program. The total amount of food being imported is not a disincentive to local production. Rather, the imports of donated food were reflecting extremely short availability during most of the period. Besides the inappropriate economic policies that had existed for years, the country suffered droughts in various parts of the country from 1988 to 1993 and had land out of cultivation because of terrorist and illegal narcotics activity. Within the agricultural activities promoted in the Title II program, emphasis has been given to growing local grains and vegetables to improve the diet.

In one or two places visited by the evaluation team, there were reports that some people were becoming dependent on donated food. In contrast, the team also heard of local leaders not wanting to accept food so the people would not become dependent. On balance, dependency does not yet seem to be a serious problem, but it is likely to become more so if employment opportunities continue to be scarce. The discussion on comedores (Annex C) cites the measures that comedores are taking in an effort to survive as the donated food is being cut off.

## SUSTAINABILITY

During the early part of the evaluation period, the emphasis had to be on distributing the food, i.e., meeting what was expected to be a short-term crisis. Generally by 1993, the agencies were all trying to focus more on longer-term food security issues. Within the comedor program, CARE in particular began to try to help comedores become independent of the food donations and to help the women who were members of the comedores to

establish income-generating activities so they would not need to depend on the comedores. Some success was made, but USAID/Washington directives to CARE required the abandonment of some these activities and a more rapid phase out of assistance to the comedores. CARITAS, in response to the USAID directives, also reduced the level of assistance to the comedores, including abruptly terminating food assistance in Chimbote.

In the agricultural development projects, some of the new technologies in land use and agricultural techniques will be maintained. Others, which were not sufficiently based on local cultural practices or environmental factors, will not continue when the food assistance ends. Specifics are discussed in Annex D and Volume IV.

In the maternal and child health and nutrition area, some practices appear to be generally accepted (vaccination and the importance of potable water), but others are not yet fully accepted, e.g., exclusive breastfeeding for the first six months, sound dietary practices, etc. The messages need to be consistent in content whether presented by the different agencies or the GOP, and the manner of presentation needs to be improved. Sustainability could also be enhanced by providing better training to the community promoters involved in the programs of the agencies and the GOP.

## VII. GENERAL ISSUES/ISSUES FOR THE FUTURE

The 1994 Food Security Strategy commissioned by USAID/Peru (summarized in III. above) stressed the importance of access to food (not just food availability and food utilization) and recommended emphasizing activities designed to increase the productivity and incomes of the extremely poor who are concentrated primarily, but not exclusively, in the rural Sierra. The Strategy also recommended that the focus on income generation and enhanced productivity be complemented with nutrition programs for Peru's most vulnerable populations, especially poor pregnant and lactating mothers and children less than six years old. It recommended terminating assistance to the comedor program, which was largely concentrated in Lima.

The geographic and beneficiary priorities of the Strategy Paper are consistent with the new directions laid out in USAID's 1995 Food Aid and Food Security Policy paper, but the latter downplays the importance of using the Title II program to improve access to food by helping increase incomes of the poor — which was an emphasis of the Strategy Paper. According to USAID officers, this was based on the assumption that substantial amounts of funding would be available from other USAID programs for income generation activities. In reviewing its program goals, USAID/Peru initially considered establishing a food security strategic goal, but ended up opting instead for a more general goal of increasing the incomes of the poor of Peru, with one of the indicators being the rate of chronic malnutrition.

The evaluation team concurs with the emphasis of the Strategy Paper on access to food, e.g., through income generation. The team feels that it was premature, in the case of Peru, for USAID/Washington to determine that there was sufficient opportunity from other programs to combat general poverty. It feels that some of the work of the agencies in promoting income-generating activities in conjunction with food distribution should be allowed to continue for a year or two longer than planned. Peru is not yet out of the economic woods. Attention to the urban poor may still be needed, although greater coordination efforts with the GOP will be essential.

The team also concurs with the importance of continuing with the maternal-child health and nutrition activities, but not just because of the time lag in dealing with Peru's poverty problem. The nutrition and health messages are essential even if adequate food were available and accessible. The team is particularly concerned about the adequacy of current efforts with regard to the content of a proper diet and breastfeeding up to two years. One USAID/Washington officer feels that the lack of long-term breastfeeding, including exclusive breastfeeding for the first six months, may be a contributing factor to the stunting problem that is believed to be so prevalent in Peru, particularly in the Sierra.

Whether or not this is true, it has been established that long-term breastfeeding is salutary to the health of both mother and infant. In addition, continued nursing may help reduce the chances of a new pregnancy. Having a child within less than two years of the previous child is not good for the woman's health, and the new baby is more likely to be born under-weight. A low birth weight baby is the most vulnerable to malnutrition and disease.

All of the agencies have been following USAID guidance on moving from the coast to the Sierra and trying to improve their targeting in those areas. Their targeting process calls for them to select districts in which to operate which have a high percentage of extremely impoverished families (from the poverty index list). Then they do surveys to select the poorest communities and the poorest intended beneficiaries within the community.

According to information provided to the auditors from the Inspector General of USAID, the cooperating sponsors (agencies carrying out the Title II program) have been told to take into account in their targeting for Title II benefits: (1) the Ministry of Education (MOE) census sponsored by UNICEF of the malnutrition status of Peru's first graders nationwide which was done in 1993 and which identifies malnutrition rates by individual school within communities (height for age measure); and 2) the Government of Peru (GOP) census done in 1993 which identified Basic Unsatisfied Needs (NBI) at the level of Peru's districts. The latter was the basis for the list of districts that have the highest percentage of its population in extreme poverty which has been used by the evaluation team to look at agency targeting.

A number of issues/questions arise with regard to the targeting:

1. The MOE census, focusing on the schools, probably under-counted the malnourished because the poorest and the most isolated are those most likely not to have their children enrolled in the school. On the other hand, the data could have over-counted the malnourished because the census only measured height. In the December 1994 Food Security Strategy for Peru, it is stated that there has been no change in the rate of chronic malnutrition, in comparison with 1972 and 1984 (earlier Demographic and Health Surveys), even though infant mortality has fallen dramatically. While the Strategy paper concludes from this that infant mortality may not be an appropriate indicator of national food security, one could equally draw the conclusion that the chronic malnutrition data are flawed. Perhaps the norms for people in the Andes are different from the international standards being utilized. Noria Humedes writes in an April 11, 1996 report (*Towards Improved Nutrition: A Contribution to Food and Nutrition Policy in Peru*):

"One interesting research question for which a satisfactory response has yet to be found is the relationship between altitude and height. [citation of different studies showing conflicting results] An analysis of DHS data collected in Bolivia in 1989 documented that stunting was positively correlated with altitude even when controlling for economic status, however comparing children of different socioeconomic levels residing in the Altiplano (between 3,000 and 4,500 meters) it was found that poor children had higher rates of stunting than those who were better off. These findings suggest that stunting might be a combination of socioeconomic status and altitude, and that when using international standards to classify children residing in the Andean Region the resulting picture may overestimate the nutritional problem (Humedes 1983)."

2. Since the MOE data seem to correlate well with the GOP NBI data, it may well be that the MOE data can be useful in targeting at the local level, as suggested by the auditors, because the data are at the community level. Even if the data may overstate the level of malnutrition because of altitude, the skewing may be consistent throughout the Sierra, the area where USAID has already directed the agencies to target. Nevertheless, it would be well to have some research to confirm their utility because the stunting percentages are so much higher than the weight for age data — e.g., 36.5 percent stunted vs. about 10 percent undernutrition in the 1991-1992 DHS report.
3. Even if the MOE data turn out to be useful for targeting at a local level, it does not follow that the height for age (stunting) data of the MOE should be utilized for measuring the impact of the program. As cited above, the stunting data do not predict trends in child mortality and the latter would certainly be of

primary importance to the GOP — and hopefully USAID. Further, given that there may be altitude as well as socio-economic factors involved in stunting, no one really knows for sure which interventions could be the most likely to show results. USAID/W officials have indicated that it is planned to restrict regular growth monitoring to weight for age; height would be measured at birth and at infrequent intervals, primarily for purposes of research.

4. While the MOE data may be useful for targeting at a local level, there is still a need for a broader targeting of the program. Both the MOE stunting and the GOP NBI data are percentages of the given population. However, if one looks at where are the largest numbers of extremely impoverished people, one finds that a number of the districts with the highest percentages are in very remote areas (and hence accessible only at great cost) and have relatively small populations. Targeting on them would likely mean increasing substantially the cost per beneficiary for delivering food, as well as increasing supervision, monitoring and training costs. The implications of this is a reduction in the number of people benefitting from the Title II program, even without a decrease in food aid (which has been forecast). The GOP is reviewing its anti-poverty plans to take account of the location of the largest number of impoverished Peruvians as well as the areas with high percentages. This seems appropriate for USAID as well.
5. Another problem with using the NBI data as a substitute for food deficiency is that the criteria used are standard and do not make any difference between rural and urban areas. Lack of sanitation facilities in an urban setting is more serious than in a rural setting. People in most rural settings have an opportunity to raise a significant portion of their food, those in urban areas do not — usually cannot. This could be offset by opportunities for earning cash, which may be better in urban areas when the economy is robust, a situation which does not now exist. Perhaps the basic NBI data could be manipulated to construct an index that might be a better proxy for a food sufficiency index, taking into account the differences in the rural and urban settings.
6. A USAID document of September 1995 (Annex E) specifically relates to the idea of targeting on the most severely malnourished. The document cites research indicating that mild and moderate malnutrition pose far greater risks to child mortality than previously documented. It states further: "In fact, the analysis estimates that the vast majority — 83 percent — of all malnutrition-related deaths worldwide occur in children who are mildly and moderately underweight. Programs directed only at treating severe malnutrition, therefore, will have only a minor impact on child mortality rates." Since programs targeted to the most malnourished are likely to be more expensive, increasing resources to such programs (which would seem to be the intent of the current targeting strategy) could result in a lesser reduction in infant mortality.
7. These new findings directly relate to operational decisions in Peru. The December 1994 Food Security Strategy for Peru suggested emphasizing PANFAR-type programs. While this makes good sense from a nutrition prevention point of view because the PANFAR concept focuses on those at risk, it flies in the face of guidelines which say focus on the severely malnourished — i.e., those that are already malnourished. At the moment, the GOP is concerned with the total level of food insecurity which has been very high throughout the country. However, as the country arrives at a reasonable level of economic activity (note we do not say normalcy), the GOP's interest should be in having an effective PANFAR-(prevention)-type program. It would seem appropriate, therefore, to continue food aid for the program and strengthen it, even if it only reaches mildly malnourished at this time, and discontinue expansion of the Kusiayllu "pilot program."
8. Even if it is not possible immediately to reconstruct the NBI data into a better proxy for a food sufficiency index, it should be possible to use the poverty data, not just the extreme poverty data, and to look at the concentrations of poor. Even if it were decided to exclude Lima, perhaps on the basis that the GOP should be in a position to take up the slack there, the remaining clusters should provide a rationale for concentration. It is quite possible that it would be found that the current locations of most of the programs would be consistent with this clustered approach. At least with this approach, there would be a rationale

for current locations and a basis for the locations that could be defended to the auditors and others. It is also possible that the results would suggest some further concentration of effort by some of the individual agencies.

### NEED FOR MORE RESEARCH

As should be evident from the above discussion, there is a need for more research and more solid data on which to base operational decisions. As one goes through the IIN report, one is struck by the number of times one says, "I wonder why that is so different in Location X from in Location Y?" One also has the impression from discussions in-country and in USAID/W that a number of programming decisions have been based more on impressions from field visits than on solid data. While the latter is understandable given the paucity of relevant, reliable data, it seems that it should lead to utilizing some Title II resources for in-country research to help guide USAID and the GOP about how to target and construct Title II programs.

Some illustrative questions that would appear worth researching include:

1. In CARITAS's PSI program, food distribution sometimes takes place, sometimes does not. Are there enough examples of each to draw some conclusions about how important the food is? If the results are about as good where no food is distributed, what are the factors that contributed?
2. The 25-30 children and their mothers being served by a health center/post probably constitute a rather small percentage of those that are being served (at least potentially) by the health center/post. Is there such a small need? The evaluation team's findings suggest that there is a much larger need. If so, are they receiving food assistance through some other mechanism? If so, from what source does the mother receive nutrition and health information and guidance? What is the MOH's role?
3. The evaluation team determined that there is a large number of health/nutrition messages in the field, some of which originate from the center, some developed locally. There is a need to determine where the messages seem to be most effective and try to determine why. Also, it appears that a message used in Piura might need to be different from one used in Cusco or Puno; if so, why and what are the implications for the design of IEC materials?
4. The importance of the community structure appears to have had an impact on the outcome and sustainability of some of the programs. What type of structure and where do we generally find it? An answer to this could suggest some targeting based on the type of community structure.
5. The evaluation was not able to look at the impact of the Title II program on micro-nutrients. This is, however, an important issue that should be of concern to USAID and the GOP. Probably some targeted research could be helpful to both.

The IIN participants can provide additional questions that could be researched and can offer suggestions for research design.

## VIII. CONCLUSIONS

### A. GENERAL

1. USAID (Washington and Lima) and the four cooperating sponsors are to be commended for effectively carrying out a large and complicated Title II program during the period 1990 - 1995 under extremely difficult conditions: political and economic upheaval, insurgency, and attempted political interference to name the most serious. The agencies are also commended for responding to: a) the changes in policy



that emanated from USAID/Washington which required extra planning and re-programming efforts at inopportune times; and b) the large number of audits and evaluations, frequently spaced closely together, which complicates program implementation.

2. There are some favorable macro-economic happenings in Peru that give hope for the future, but the number of under-employed and unemployed are still estimated at 80 percent. From a food security point of view, Peru is not out of the woods. USAID should be careful not to reduce its support too rapidly — see the Comedor section below.
3. As USAID and the agencies look to a gradual phase-down of food resources, the importance of the program messages that go with the food take on increasing importance, especially in health and nutrition and agricultural development. The evaluation team has made a number of suggestions to the agencies for ways to improve the message and its delivery. It will be important for USAID to be prepared to support the costs that may be implicit in these suggestions.
4. USAID/Washington is to be commended for having approved a significant level of monetization of Title II food for support of the Peru program; CARE is to be commended for its implementation locally of the monetization. It is hoped that this monetization support will continue at a high level because the needs for it are apt to be greater as the agencies implement the team's recommendations and USAID/Washington's mandate to serve the poorer populations in the more remote areas of the Sierra and the selva.
5. USAID should be prepared to review its targeting policy for food aid in Peru, taking into account the observations in Section VII above and the Peruvian government's evolving strategy for dealing with poverty in the country.
6. Some carefully constructed research activities could be helpful to the USAID in strengthening the impact of its Title II program and in formulating a strategy for the phase-down of its program.

[Note: the conclusions that follow are taken from the three program annexes (B,C & D). A more detailed discussion there provides a basis for the conclusions. Even more back up is available in Volumes II, III and IV submitted by the IIN.

## **B. MATERNAL AND CHILD HEALTH PROGRAMS**

1. All of the agencies are to be commended for their dedicated efforts to get food and nutritional and health messages to the most vulnerable members of society, children and pregnant and lactating mothers. PRISMA and CARITAS are especially cited because of their much larger programs and their efforts throughout the country, including in insecure areas. PRISMA has had a unique situation (among the four) that has been particularly onerous to deal with at times: working through the Ministry of Health. All agencies have gained invaluable experience in working with local communities, helping distribute health and nutrition messages, cooperating with government authorities at various levels, serving as the forerunners for a primary health care system.
2. During the crisis years, the priority had to be in getting food where it was needed. As we move into a period of diminishing Title II food resources for distribution, the nutritional and health messages need to be given a much higher priority. Similarly, the training of the local promoters (in the community) and the Ministry of Health personnel becomes especially important as the issue of sustainability comes to the fore. For that reason, the suggestions of the evaluation team for program improvement for the individual agencies have focused on the content of the nutritional and health messages and how they can be delivered more effectively.
3. The current targeting guidelines need to be reviewed — see section VII above.

4. Another issue of concern is the level and type of growth monitoring activity in the field. In general, research indicates and cautions that in using growth monitoring the focus of interventions becomes the process of weighing children and accurately plotting information on growth charts. In essence focus is taken away from nutrition and health education interventions. This is what was found in the field in the programs evaluated; they lacked adequate human resources to properly manage, supervise, monitor and implement programs. Also of concern was the amount of measuring of the height/length of the babies.

Fortunately, the team was informed by USAID/W personnel that USAID's policy on growth monitoring is being changed to reflect the accumulated research findings; it is planned to restrict regular growth monitoring to weight for age; height would be measured at birth and at infrequent intervals (e.g., age 3, age 5), primarily for purposes of research.

5. In general, information systems were found to be complicated and cumbersome, particularly when viewed by the personnel in the field who are supposed to feed the data into the systems. From the perspective of providing data at the individual level for all the children under their project, CARITAS has the best system — even though it needs strengthening at the local level. The evaluation team is concerned that the imposition by USAID of additional information requirements on the agencies will complicate matters even more.
6. All four agencies have spent time, effort and money on the development of nutrition and health education materials and training. Although the agencies have coordinated with the MOH in an effort to follow norms of child survival programs (EDA, IRA, immunizations, etc.), little coordination has taken place between agencies with regards to these matters. Thus, the messages are not always consistent.
7. Additional coordination is needed among the agencies and with USAID, especially with regards to time, efforts and money used in technical areas of the program — from the development of nutrition and health education strategies, to training methodologies and materials, to the implementation of information systems and commodity management. Organized opportunities by which sharing and coordination could be accomplished might save time, money and efforts.

#### C. COMEDOR PROGRAMS

1. The establishment of comedores is a unique way that Peruvian women have used for nearly 30 years to survive and maintain their families in times of crisis. The comedores alone, however, were grossly inadequate to deal with the multiple crises that existed from 1988 to the present. At the same time, however, they provided a most efficient and cost-effective way of distributing food to those in need in the urban slum areas. The women who are members of the comedor cook the food as well as make a small cash payment to contribute to the total cost of the meal.
2. Since the Peruvian governments during the first half of the evaluation period were unable or unwilling to provide an adequate safety net for the poor, the distribution of donated foods, such as that provided by USAID and distributed by CARITAS and CARE through the comedores, made a very significant contribution to family nutrition and well-being. If actions in other countries by people faced with a crisis like that which existed in Peru is any guide, the large-scale assistance may also have contributed to political stability during the period.
3. The decision by USAID/Washington in 1993 to reduce its support to the comedores was based, at least in part, on the assumption that the Peruvian economy was on the road to recovery so personal incomes, particularly in the urban areas, would be on the rise. Unfortunately, the progress in the economy in 1993 and 1994 was followed by some retrogression in 1995. Increases in investment have not resulted in increases in industrial production and employment. Thus, it is unfortunate that the USAID support was

reduced so abruptly. Based on the following elements, the evaluation team believes that comedor support from some source may be needed for a longer period than now planned:

- a. The economy is surely in better shape than it was four years ago, but it is still not anywhere near pre-crisis levels, inflation is still a problem for the poor, the adjustments necessary for recovery are still not over, and the economy is currently backsliding (see the discussion in the Overview, Section II;
- b. In over 200 interviews with members of comedores or community people working with the comedor program, a constant theme was that the economic situation in the slum areas is getting worse. Furthermore, only one woman in seven had a spouse with a full-time, regular job. Most every woman is trying to devote some time to an outside job, but the resulting income is minimal.
- c. A considerable number of the comedores have closed as a result of the termination of assistance (as high as 30 percent of the CARITAS-supported comedores in Chimbote).
- d. The comedores which are no longer receiving donated food, but which are trying to keep operating, have responded by trying to augment their resources and/or cut their costs. Resource augmentation measures include: 1) increase the price of meals to their members; and 2) increase or begin to accept non-members (who are charged more than members). Cost-cutting measures include: 1) reduce the amount and quality of the food being served; and 2) reduce drastically or eliminate support to hardship cases who are unable to contribute labor or funds to cover their participation in the comedor. 37 of 44 comedores in Lima and all 17 contacted in Chimbote have reduced the support of hardship cases — from 440 to 200 in Lima; 173 to 54 in Chimbote.

The increase in prices and/or reduction in the quality of the meal has resulted in a significant loss of members. Many of the comedores, particularly the poorest, are not in good locations to attract the public. Given all of the foregoing, plus the fact that CARITAS/Lima did not give priority to preparing the comedores for the loss of donated food and CARE was unable to complete PRODIGIA II, it is likely that a significant number of those comedores trying to continue will not be able to do so.

- e. Given the closure already of some comedores, the negative impacts cited above which are taking place in the comedores no longer receiving donated food (loss of members, reduced nutritive value of the meal provided, and an increase in unattended "social cases"), and the likelihood that additional comedores will fail, the rate of malnutrition, which appears to have been relatively stable, is likely to begin to rise again. In fact, Ministry of Health personnel in Chimbote told the evaluation team that the malnutrition rate there is higher now than it was in 1992.
4. One of the salutary impacts of the comedor program has been the training received by the members as well as the managers (dirigentes). This has given the women increased self-respect and has allowed them to participate more in communal activities and organizations. In addition, membership in the comedor has helped them contribute to the family income, either by receiving rations for their work in the comedor or by freeing up time from cooking so they could participate in other income-generating activities.
  5. Using the comedor as a base for health and nutrition education and promotion activities has been moderately successful, depending upon the quality of the Ministry of Health personnel assigned and the priority given to the activity by the sponsoring partner — highest priority by CARE, better in CARITAS/Chimbote than in CARITAS/Lima.

**D. AGRICULTURAL DEVELOPMENT**

1. Because of a commitment to service and to a better Peru on the part of their personnel, often in the face of low salaries and always under austere working conditions, the cooperating sponsors have in varying degrees successfully met the challenge of increasing the food security of their constituents over the past six years. It began in the early 1990s with keeping people alive because Peru, unlike other countries (e.g., Bolivia), had no safety net, no emergency fund (fondo de emergencia) when it instituted draconian economic and financial measures as part of its structural adjustment. Creating a safety net fell primarily on the agencies being evaluated herein.
2. Apart from the contribution of donated food itself to total family food supply in many impoverished Sierra communities (a sobering commentary on production levels), all of the projects have enjoyed some success in meeting the mandates of the Title II program in agriculture and rural development:
  - ▶ All have increased the awareness of the need to practice soil conservation. The work of CARE/PRONAMACHCS in particular should be mentioned.
  - ▶ The projects have all increased the capacity of poor farmers to organize themselves, analyze their problems, and take decisions. The work of CARITAS and of the power of the Catholic Church to mobilize resources at the community level in the remotest corners of Peru deserves mention.
  - ▶ The projects have also enjoyed success in stressing the value of certain foods in the diet, especially in the diet of children. Here, one notes the work of ADRA/OFASA, with its integrated family focus and its gains made in introducing foods such as amaranth into the family diet and in sensitizing mothers to the importance of such foods for growing children.
3. All of the cooperating sponsors have some weaknesses in providing technologies appropriate for Sierra farmers. Few of the rotating credit funds observed are sustainable, and all of the agencies have to some degree used inferior seed. Some of the technologies do not take into account the farmers' financial capabilities and their risk-aversion decision-making processes. At times, production has been geared to selling in the market without adequate market analysis. While the agencies can make some improvements in operations, these problems are part of a much larger one: **the Peruvian State does not have the capacity to address the agricultural problems of poor farmers of the Sierra.** This dilemma has four dimensions:
  - ▶ There is no public policy for addressing the agricultural needs of this group.
  - ▶ No public research and extension entities (with the possible exception of PRONAMACHCS) are able to reach this group with appropriate technologies.
  - ▶ No public credit entity is in a position to assist the group.
  - ▶ Limited public capacity exists for seed research and multiplication.

Until these critical deficiencies are remedied, there is no prospect for addressing the agricultural needs of this group adequately over the long term — assuming that the farmers remain farmers, settled where they now are.

On the other hand, addressing the needs of this group responds to three current USAID thrusts:

- ▶ The food-security strategy seeks to increase food availability (production) among poor farmers of the Sierra.

- ▶ Keeping poor farmers in the Sierra reduces migration to the eastern selvas to work coca. Interviews conducted during this evaluation reveal a substantial sporadic migration to the selva among residents of project communities.
- ▶ Improving the lives of Sierra farmers also improves the environment in the Sierra (e.g., through soil conservation) and in the selva, where the coca trade destroys the forests and pollutes the waters.

It seems appropriate therefore that USAID (not just the Food for Development office) should work with the Peruvian government, as well as with the cooperating sponsors, to increase and make more effective the support given to the agencies in their agricultural development efforts in the Sierra.

4. Reaching the poorest of the poor in the Peruvian Sierra (the current food security mandate) is a high-cost endeavor because the poor tend to be in the remotest, least accessible areas. It is expensive to transport the food to such areas, and costly to maintain secure warehouses in such areas (USAID is concerned with security of the food as well as with food security). Hence, two scenarios seem likely: 1) USAID and the agencies have to find new ways to deal with the problems, and increased food monetization will probably be necessary to support these new approaches; and/or 2) a decision will be made to forego trying to reach the most remote and concentrate on supporting the movement of people from the most remote areas to magnet urban centers as currently is being planned by the Office of the Presidencia.
5. There is a great potential for the use of greenhouses in the high-elevation zones of the country where inclement weather can ravage open-air crops. Greenhouses can be helpful in improving the family diet, especially with the production of vegetables. Agencies should be mindful of certain caveats when drafting a strategy for greenhouses: (1) Working large houses collectively may not be viable in some communities; even when farmers have individual plots within them, the structures must be maintained and operated collectively; (2) the first consideration in a greenhouse strategy should be improvement of the family diet; marketing considerations should be a secondary concern. Marketing may be viable in some places.
6. All of the agencies have worked with women, often in a massive way. This work has not only imparted knowledge to women (the production of vegetables, for example), but has given them experience in organizing and taking decisions. In this it has helped them gain self-confidence and self-esteem. Yet, this relatively untapped resource could help make projects more effective if the agencies had a "gender policy" which would require that: (1) women should be part of the design of projects and project activities; and (2) agencies require that women be represented in important project/activity decision-making bodies, especially at local levels (i.e., where projects operate). To help make this policy effective, the agencies should consider leadership training such as been provided through some comedor activities and through Mothers' Clubs.
7. Since hybrids are not available and are costly, and since they degenerate quickly, the projects should focus on selecting and improving local seed. The latter tolerates local climatic phenomena better.
8. In agricultural interventions, attention should first be given to improving the family diet directly (rather than through market sales of agricultural produce). It appears that family gardens, rather than community gardens, may also be more culturally acceptable. Crops of great value in improving local diets are the Andean grains (amaranth and quinoa) and vegetables. The strategy followed by ADRA is sound in this regard; in parts of Ayacucho, ADRA is successfully integrating amaranth (kiwicha) into the diet of young children.

## IX. RECOMMENDATIONS

### A. GENERAL

1. USAID/Washington should review targeting guidelines that it may have established for Peru, taking into account the discussion in Section VII above and/or recommend to USAID/Peru that it review with the agencies and the MOH the targeting policy for the Title II program, taking into account the Section VII issues.
2. USAID/Washington should reconsider its position of not supporting income-generating activities as part of the Title II programs, at least in the case of Peru for the next two or three years.
3. USAID/Washington should be prepared to support and USAID/Peru should arrange for some research activity in support of Title II targeting and implementation — some research ideas are set forth in Section VII.

### B. MATERNAL AND CHILD HEALTH PROGRAMS

1. USAID/Peru should coordinate an effort (workshop or other mechanism) with the MOH and agencies implementing Title II Programs to review, revise and reach consensus on nutrition and health education messages for improved program impact.

Content of training programs and methodologies should also be reviewed. Social marketing, communications and educational strategies for enhancing awareness and motivation should be considered.

2. USAID/Peru should confirm with USAID/W that new guidelines on growth monitoring will be forthcoming soon. If they are not expected soon, USAID/Peru should coordinate an effort to address the appropriate anthropometric measures to be used in the Title II Program in Peru.

Such a roundtable or "convocatorio" should bring together the agencies, other interested NGOs, the MOH, INAN, local universities, international agencies and technical assistants to facilitate the development of protocols, standards and/or guidelines for use in Peru.

3. USAID/Peru should improve the coordination between the Food for Development office and the Health, Population, and Nutrition office, especially in responding to the recommendations above.

In addition, HPN may be able to help facilitate improved relations between the agencies and the MOH (especially PRISMA) and improve the technical soundness of programs in areas of nutrition, family planning and child survival themes (EDA, IRA, immunizations, etc.). HPN has successfully utilized the social marketing approach in their work with some 13 cooperating sponsors working in the area of family planning.

### C. COMEDOR PROGRAMS

1. That USAID foster appropriate steps to assess more completely the impact of the termination of USAID support to comedores.

This might include some or all of the following:

- a. the funding of a follow-on "Vigilancia Nutricional" study in Lima in the areas that were studied in 1991;
  - b. arranging for some expansion in the scope of the up-coming study of comedores on behalf of the Office of the Presidencia;
  - c. facilitating and supporting as necessary the implementation by the cooperating sponsors of the recommendations made to them by the evaluation team.
2. That USAID consider prolonging for another year or two its assistance to comedores, even if at a reduced level, particularly if the more complete assessment recommended in 1. confirms the concerns of the evaluation team. In the interim, USAID could explore possible replacements for at least part of the reduction of USAID assistance to the comedors.

One possibility might be to encourage the European Union to pick up for a year or two some of the comedores dropped by USAID.

3. That CARITAS/Lima increase and specialize its training activities to comedores that are still being supported with food to prepare them for when the food donations terminate.
4. That CARITAS/Lima and CARE follow up with comedores that have recently lost their support, but which are still functioning, to determine the following:
  - a. Would additional training or consulting services increase their chances of survival?
  - b. Have they found new ways to cope (e.g., starting gardens)? Are these new ways replicable?
  - c. What has happened to the "social cases" that have been dropped from the rolls of the comedor?
  - d. What has happened to the members who have left the comedor as a result of the raising of prices?
  - e. Have the comedores found other sources of assistance? Would they be available to others?
5. That CARITAS check periodically with health centers in the poor areas where they operate, or have operated, to determine if the centers are treating an increasing number of illnesses of children under six or of pregnant and lactating mothers.
6. That CARITAS/Lima explore other means, possibly through the Mothers' Clubs or other communal organizations, to establish an early warning system of food deficiency/elevated health problems.

**D. AGRICULTURAL DEVELOPMENT**

1. USAID should work with the cooperating sponsors to develop a strategy to reach poor Sierra farmers with appropriate technologies. There are two broad parts to such a strategy: (1) the institution of a process to make technologies appropriate; and (2) the establishment of links to technology sources.

The Farming Systems approach to research and extension (i.e., adaptive research) would provide the process, while the technology sources would vary — International Potato Center (CIP) for potatoes and the Agrarian University at La Molina for grains. CIP also has much valuable experience with the systems approach. An agency-CIP link would thus provide process and tuber technologies.

2. As a first step to establishing these links, and to facilitating the sharing of experiences of the agencies with each other, USAID should sponsor with the GOP a seminar-workshop in which each agency would discuss its methods, challenges, and problems regarding technology generation and extension.  
  
CIP could present the farming systems approach and explain what the approach might offer the agencies, and what CIP has to offer them.
3. USAID should consider organizing with the GOP a seminar-workshop, similar to the technology workshop, on agricultural credit, with special emphasis on rotating credit funds.

## X. LESSONS LEARNED

The Title II experience in Peru suggests some conclusions that might be of use in considering another emergency in Peru or in dealing with a similar emergency in other countries:

1. The comedor program was a very effective way to reach the urban poor, while the food for work was effective in reaching the more rural areas. It would be of interest to determine whether comedor-type programs have been or could be effective in other cultures.
2. Monetization of Title II food was appropriate given the general shortage of food and the need for funding to make the programs effective. The monetization needs are rising as the agencies strive to reach the poor in the more remote areas of the country.
3. Targeting in Peru presents special problems because poverty is so serious and widespread. It appears that a poverty index is not necessarily a good guide to food-deficient. Further, recent research results suggest that trying to target those in extreme poverty may not be good policy.
4. It has become obvious to the evaluation team that a good evaluation of impact of a program requires clear statements of goals that do not change frequently, good baseline data, and information systems that are consistent over time. The agencies are working in that direction, but these requirements did not exist for the evaluation period.

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**ANNEX A**

**SIGNIFICANT SECTIONS OF THE EVALUATION**

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[NOTE: Section I (Background) has not been reproduced here.]

## II. OBJECTIVES OF THE EVALUATION

The evaluation will cover the period from 1990 to the present, which includes the years during which the country went through its most recent economic crisis. The overall objective of the evaluation is to determine whether the Title II program as a whole, as well as key programs implemented by the individual cooperating sponsors, have been effective in reducing food insecurity in Peru over this time period and to make recommendations on how and the cooperating sponsors and USAID/Peru can enhance the degree and sustainability of the impact of their programs.

Specific objectives include the following:

- ▶ Assess the design and operations of the Title II program from the period 1990 to 1995 to determine the extent to which the program met its specified objectives.
- ▶ Assess the multiple impacts of the Title II program on beneficiaries and their communities with respect to food security and nutrition (i.e., the three dimensions of food security -- availability, access and utilization).
- Assess the uses and relative importance of the direct distribution of food, monetized food and other sources of program support to these impacts.
- ▶ Identify the important determinants of program impact, or lack thereof, and make recommendations for enhancing the degree and sustainability of program impact through changes in the composition of the program, as well as in the technical and administrative aspects of individual programs.
- ▶ Assess the mechanisms for and the extent to which Title II programs are effectively coordinated and consistent with other food assistance and related programs, including other donor and GOP programs, both at the national level and in field locations.
- ▶ Provide specific guidance to USAID/Peru and the Title II cooperating sponsors for improving their interventions. This will include recommendations designed to sharpen program focus and improve program effectiveness and impact.

## III. SCOPE OF WORK

The final report will include assessments of the key programs being undertaken by the four cooperating sponsors as well as a summary section which compares and contrasts the relative effectiveness of the different program types, synthesizes the results of the individual assessments and provides an overview and assessment of the program as a whole over the time period of the evaluation (1990 to 1995). (See Section VII for more details on the organization and length of the final report, numbers of copies, etc.)

### A. PROGRAMS TO BE ASSESSED

Separate assessments will be prepared for each of the following program categories:

- ▶ Maternal child health programs — This assessment will include programs directed to pregnant women and mothers with pre-school children which include health and nutrition education in addition to food

supplements. This part of the evaluation will also include a section on programs directed to pre-school children which include education for the children in addition to the food supplements in order to assess the cost effectiveness of these types of programs in relationship to the maternal child health programs.

- ▶ Community kitchen programs — This assessment will cover comedores that have skills training/income generation activities included as well as those that have not moved beyond their original objective which was to provide an income supplement (in the form of food) to households living in poor, peri-urban areas in exchange for work.
- ▶ Agricultural development programs — This assessment will include sub-sections on road building/maintenance, greenhouses, irrigation canals, soil conservation/agroforestry, and general agricultural development and include activities supported with food for work and revolving funds.

These three program intervention categories were selected because of their relative importance during the period when measured in terms of numbers of beneficiaries or amount of commodities used (comedores and maternal child health programs) and/or because of the relevance of the results of the evaluation to future programs (maternal child health and agricultural development programs). Microenterprise programs will not be included in the evaluation for two reasons.

First, microenterprise programs represented only a small portion of the program over the period that is to be evaluated. With the exception of microenterprise activities directly related to agricultural production, they also are not consistent with the new Food Aid and Food Security Policy paper and will not be eligible for Title II support in the future.

## B. CONTENT OF THE INDIVIDUAL ASSESSMENTS

Each of the three assessments will include the following:

- ▶ A description of the program type, the objectives, the target population, how the program operates, the role of food aid in the program.
- ▶ A discussion of the variations in the programs (different models) among cooperating sponsors and their potential significance in terms of differences in effectiveness, impact, and sustainability; how the ADRA, CARE, and CARITAS maternal child health programs differ from the PRISMA program, for example.
- ▶ An analysis of the relative importance of the program type over time, in terms of changes in the numbers of beneficiaries and in the percentage of the food resources going to the program. This analysis will be undertaken for the program as a whole as well as by individual cooperating sponsors.
- ▶ An analysis of how well programs are actually targeted to the nutritionally vulnerable, in the case of the MCH and other child feeding programs, and to poor communities and households, in the case of the comedores and agricultural development programs.
- ▶ An analysis of the impact of these programs, by cooperating sponsors if the models used are significantly different. The focus should be on impact indicators, but process indicators may also have to be used if the data available on impact indicators is weak. A number of different process and impact indicators that are suitable for each of the three main program types are presented in Table 2. The evaluators should use these plus any additional indicators that are specific to the individual cooperating sponsors programs.

Title II programs may also have important impacts on policies, programs, institutions and the social dimensions of community life. These types of impacts will have to be assessed, but will require more qualitative indicators.

- ▶ An assessment of the sustainability of these projects. In some cases — the programs dealing with the nutritionally vulnerable, for example — the important issue is institutional sustainability. In other cases — the comedores, green houses, microenterprise activities — a key issue is economic sustainability.
- An assessment of whether these activities create disincentives to local production and/or to individual/community self-help. Both are particularly important issues in agricultural communities in the Sierra, both because they produce food and because many of these communities still retain differing vestiges of centuries-old patterns of community organization and self-help.
- ▶ An assessment of the management efficiency and effectiveness of the individual cooperating sponsors in carrying out their activities in this area. This should include an analysis of the following:
  - Cost of delivering the food per beneficiary;
  - Cost per beneficiary of other elements of the program such as materials, training, supervision, etc.;
  - Quality of the technical assistance provided and the effectiveness of delivery;
  - Content and quality of the training provided to beneficiaries and how important it is with respect to impact;
  - Content and quality of the training provided to project staff, promoter, etc.;
  - Adequacy of supervision, planning, and management.

This information should be collected and assessed for individual cooperating sponsors as well as comparisons made across sponsors.

- ▶ A description and assessment of the monitoring and evaluation systems being used by each of the cooperating sponsors to track impact.

### C. SYNTHESIS OF THE INDIVIDUAL ASSESSMENTS AND OVERVIEW OF THE ENTIRE PROGRAM

The final report will provide an overview of the program as a whole over the time period of the evaluation (1990 to 1995) and in the context of the political, social and economic conditions that existed in Peru during that time period. This section will include an analysis of the trends in Title II food entering the country; the amounts monetized and used directly in programs; the relative amounts of food going to the different cooperating sponsors over time and the numbers of beneficiaries reached; changes in the relative importance of different program types in terms of food resources being utilized and beneficiaries being reached; the relative distribution of food and beneficiaries by urban/rural location and geographic region (coast, sierra, selva).

The final report will also synthesize and draw conclusions based on a comparison of the relative effectiveness of the different program types. Factors that will be looked at will include: the cost of delivering the food per beneficiary; the cost per beneficiary of other elements of the program; the quality of the technical assistance provided and the effectiveness of the delivery; the content and quality of the training provided and the training techniques used to train beneficiaries and staff; how well the programs are targeted to the food insecure; the food security impacts of the programs; their economic sustainability; whether they are institutionally sustainable; whether they create disincentives and/or discourage individual community self-help. This section will include an assessment of GOP policies, programs and institutions which influence the effectiveness of the Title II programs. And it will discuss the Title II programs in the context of the Mission's current strategic plan and in particular the linkages between the Title II programs and the Mission's new food security strategic objective.

The final report will also include a separate section which identifies specific recommendations for improving program effectiveness and impact, for the Title II program as a whole as well as by program type. This section should include/consolidate any recommendations regarding priority interventions, ways to improve training components, improvement of management capacity, criteria for sub-project/beneficiary selection and ways of improving data collection, monitoring and reporting of program impacts.

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## IV. METHODOLOGY

The evaluation will be designed to look at key issues and impacts across program types. This approach should provide USAID/Peru and the cooperating sponsors with sufficient information to determine, in relationship to specific objectives, how resources could be better allocated and where particular activities need to be strengthened.

### A. SOURCES AND METHODS OF DATA COLLECTION

The assessments for each of program type will be based on:

- ▶ A review of program reports and records and administrative data, including an analysis of data from a sample of each of the cooperating sponsors monitoring and evaluation systems;
- ▶ Interviews with cooperating sponsor staff, USAID/Peru counterparts, and beneficiaries;
- ▶ Site visits to selected communities to validate program information and to gather additional information through focus groups and structured interviews with project participants and community-level personnel.

### B. SITE SELECTION

Site selection will be made in consultation with the cooperating sponsors and USAID/Peru. Two sites will be identified on the coast and three in the Sierra. Potential sites on the coast are Lima and Trujillo and in the Sierra — Cajamarca, Arequipa and Juliaca/Puno. The sites will be selected in order to insure that the information collected provides sufficient coverage by urban/rural location; agro-ecological zone; and program type by cooperating sponsors. The evaluation team will also have to identify ways of assuring some comparability among beneficiary communities, e.g., similar levels of socio-economic development. When and if these comparisons are not possible, those undertaking the evaluation may have to try to interview non-participant individuals/communities as well as participating individuals/communities.

### C. ILLUSTRATIVE COMPOSITION OF EVALUATION TEAM

Specialized teams of local experts hired by a Peruvian contractor will be put together for each of the three assessments. Planning and supervision of field work, technical guidance, drafting and editing of final reports, and overall quality control will be the responsibility of a U.S. firm under separate contract.

- ▶ Assessment of Maternal Child Health Programs — This team will consist of an expert in maternal child health programs, a rural sociologist/anthropologist and a research assistant. At least two members of this team will have the skills needed to carry out rapid assessments of a community's health/nutritional status, including taking measurements of the nutritional status of a sample of the under-five children in the community.
- ▶ Assessment of Comedores — This team will consist of an economist and an anthropologist/sociologist with experience in food programs and community development programs.
- ▶ Assessment of Agricultural/Productive Infrastructure Programs (including those that use food for work and revolving funds) — This team will consist of an agricultural economist, an agriculturalist and an anthropologist/rural sociologist.

The contractor team will consist of three senior professionals with extensive development experience. All three should have experience with food aid programs, have excellent English language writing skills, be fluent in Spanish, and have previous working experience in Latin America, preferably in Peru. One of the team members should have an agricultural economics background and another a strong background in maternal child

health/nutrition programs. Other skills that need to be contained in the team include: anthropology/rural sociology; project design and evaluation; monitoring and evaluation systems; institutional assessments; health/nutrition education; agricultural extension; cost-benefit analyses; the collection and analysis of anthropometric data; rapid rural appraisals and other ethnographic techniques.

#### D. COMMON TASKS

All three assessment teams will have the following tasks in common:

- ▶ Visit the headquarters of the cooperating sponsors for detailed briefings on the goals, purposes, geographical location and operations of their program.
- ▶ Review the MYOPs covering the period of the evaluation (1990 to 1995), annual and other progress reports, and any evaluations of programs undertaken during the time period covered by the evaluation.
- ▶ Collect, assess and synthesize the information from the individual cooperating sponsors' monitoring and evaluation systems on key indicators of process and program impact (see Table 2 for examples of the types of indicators that may apply in the case of each of the three program types) by urban/rural location (if appropriate), and by major geographical location (using a reference that is consistent across cooperating sponsors). Assess changes in indicators over time, attempting to link impact to changes in processes and/or changes in the broader environment in which the programs were operating.
- ▶ Assess impact in a sample of project sites.

#### E. SPECIFIC FIELD TASKS

Each of the three assessments will have the following specific field tasks:

- ▶ Assessment of Maternal Child Health Programs — This team will assess how well projects are targeted to the appropriate beneficiaries — in this case, the most nutritionally vulnerable. Field visits will be made to selected project sites on the coast and in the Sierra. In project sites, team members will use rapid appraisal techniques to: determine the nature, length of time and operation of the interventions; verify the data obtained from the cooperating sponsor(s)' monitoring and evaluation system; collect information on the socio-economic characteristics of the community and the beneficiary population; measure the nutritional status of a sample of under-five children; using focus group interviews assess the knowledge, attitude and practices (KAPs) with respect to the health/nutrition interventions of a sample of the adult beneficiary population. In non-project sites, the team will assess the socio-economic characteristics of the community (since these sites are supposed to function as controls, the socio-economic characteristics of the project and non-project sites should be somewhat similar); measure the nutritional status of a sample of under-five children in the community; and using focus group interviews, assess the KAPs of a sample of the adult population with respect to the health and nutrition interventions that are a core part of the cooperating sponsors' programs.
- ▶ Assessment of Comedores Programs — The team will look at the issue of how well these projects are targeted to the proper beneficiaries — in this case the poorest households. Field visits will be made to selected project sites on the Coast and in the Sierra). In project sites, team members will use rapid appraisal techniques to: determine the nature, length of time and operation of the interventions; verify the data obtained from the cooperating sponsor(s)' monitoring and evaluation system; collect information on the socio-economic characteristics of the community and the beneficiary population; and using focus group interviews assess the knowledge, attitude and practices (KAPs) with respect to the specific education interventions, if any, of a sample of the adult beneficiary population. It would also be useful to have a control group for the comedores projects.

In this case, the team will have to determine whether non-project communities should be identified and used as controls or whether the team should concentrate on interviewing families within the same area who are non-participants in the comedores. Assessment of Agricultural Development/Productive Infrastructure Programs — This team will look at the issue of how well these projects are targeted to the proper beneficiaries — in this case, the poorest farm communities and households. Field visits will be made to selected project sites on the coast (one area will be visited) and in the Sierra (three areas will be visited). In project sites, team members will use rapid appraisal techniques to: determine the nature, length of time and operation of the interventions; verify the data obtained from the cooperating sponsor(s)' monitoring and evaluation system; collect information on the socio-economic characteristics of the community and the beneficiary population; and using focus group interviews assess the knowledge, attitude and practices (KAPs) with respect to the specific education interventions, if any, of a sample of the adult beneficiary population. The agricultural economist will also collect information on the costs and benefits of the individual interventions in order to ascertain whether they are profitable to the community/individual households once the intervention is withdrawn. The team will also visit nearby non-project sites, in order to get a better feel of the level of knowledge and economic well-being of similar communities that did not have the benefit of the agricultural interventions. Rapid appraisal techniques will be used to assess the socio-economic characteristics of these communities and focus groups to assess the KAPs of a sample of the adult population with respect to the agricultural interventions that were included in the cooperating sponsors' project intervention.

## V. IMPLEMENTATION PLAN

### A. ORGANIZATION OF THE EVALUATION

The evaluation will be conducted by both a U.S. firm and a local Peruvian contractor, under separate but complementary contracts. The U.S. firm will be responsible for providing guidance and oversight to the field operations ensuring the quality of the program assessments, integrating and synthesizing report components, and preparing the final report for USAID/Peru. The local field contract team will have major responsibility for carrying out the majority of the field work, based on a field work design approved by the U.S. firm, USAID/Peru, and USAID/CDIE, and for preparing drafts of the assessments on the three major types of projects under the Title II program — maternal child health, comedores, and agricultural projects.

## VI. FINAL REPORT

- A. Format — The final report will contain an executive summary (2-5 pages), the main body of the report (25-30 pages) and a section on conclusions and recommendations (5 pages). The results of the three assessments — maternal child health, comedores, and agriculture/productive infrastructure — will be also be summarized in separate annexes of 10-15 pages each.
- B. Language — The final report will be written in English.
- C. Numbers of copies — printed copies and a computer diskette containing the document in the final form using Word Perfect 5.2 for Windows.
- D. Date Due — The contractor's draft report will be submitted by the end of Week 11, at which time all key findings and recommendations will be presented in a debriefing session. USAID/Peru will have three working days to review and provide comments. Comments and recommendations made by USAID/Peru will be incorporated by the contractor in its final report.

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**ANNEX B**

**MATERNAL AND CHILD HEALTH PROGRAMS**

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- 2 Attitudes of Mothers in Relation to Child Health Topics
- 3 Attitudes of Mothers in Relation to Maternal Health Topics

## I. INTRODUCTION

### A. METHODOLOGY OF THE EVALUATION

The evaluation was carried out by a team of eight professionals contracted by the Institute of Nutritional Research (IIN in Spanish) and a consultant from Development Associates, Inc. The team reviewed reports of the various cooperating sponsors (hereafter called agencies): ADRA/OFASA, CARE, CARITAS, AND PRISMA. After consultation with the agencies, the team selected the sites to be visited: 12 sites in 2 provinces of Piura department; 2 sites in Chiclayo in Lambayeque department; 4 sites in 2 provinces of Cusco department; and 8 sites in 2 provinces in Puno department.

The team prepared questionnaires and check lists for use in interviews with Ministry of Health and project personnel, local officials, and other interested and knowledgeable people. In addition, focus groups were held with beneficiaries to obtain their view of program activities and to test their comprehension of health and nutrition education messages being promoted by the different agency programs.

Upon completion of the field work, the team met with the agencies to review its findings in the field and to obtain clarification and/or additional information as needed. In addition, some of the data had to be organized and processed, e.g., information collected on the weight gain of children at various centers and the mothers' responses on knowledge, aptitude, and practices (KAP) relating to the health of their children. Additional information on the methodology of the evaluation can be found in Volume II of this evaluation.

### B. PROGRAM SETTING

The period of this evaluation, 1990-1996, was a period of great difficulty for Peru and Peruvians and for the agencies trying to help. Nutritional standards were already declining at the beginning of the period due to droughts in the sierra beginning in 1988, political and economic chaos (with runaway inflation) during the last two years of the Garcia government (1988-1990), and interference in the execution of agencies' programs by politicians as the 1990 election approached. The election of Fujimori in 1990 was followed by economic shocks as the new government set about to bring inflation under control and took draconic measures as part of a structural adjustment.

Working with the Ministry of Health was not an easy task during most of the period due to re-organizations, changes of personnel (three leadership changes in the National Health Institute (INS) in 1994), and strikes. Because of the security problem in the first part of the period, many health facilities in the sierra were abandoned. PRISMA was most affected by the Ministry's problems because it works most closely with the Ministry.

All of the agencies had to deal with the political and economic chaos of the early part of the period. CARE and ADRA/OFASA were affected by the violence in the highlands and did not try to operate there during the first part of the period. Extra efforts were taken by the agencies to help the Peruvian government deal with the food shortages of 1989-1990 and the cholera epidemic of 1991.

The social programs of the government were minimal and of limited effectiveness until 1993 when PRONAA (Peruvian National Food Support Program), which had been created in 1992, began to arrange for large-scale food distribution — largely through the *comedores* in the poor urban suburbs of Lima.

### C. OVERVIEW OF MATERNAL AND CHILD NUTRITION PROGRAMS

The four cooperating sponsors operate different types of programs, and these will be discussed in separate sections below. To help put their programs in perspective, there follows in Table B-1 information on the number of

beneficiaries that were being served and the amount of food that was being distributed annually by each agency during the 1990-1995 period.

The data utilized are from the Annual Estimate of Requirements (AERs) and include the following categories: Maternal Child Health - Mother; Maternal Child Health - Child; Preschool Child Feeding; and Other Child Feeding. The data for CARE include the category Special Groups. The Other Child Feeding category for CARITAS has been adjusted to take out comedor support. It is recognized that there can be some variation between the estimates and the actual distribution of food. These data, however, appear to be the best proxy that is available on a reasonably consistent basis for the four agencies and for all of the years.

TABLE B-1

## Food Distributed and Beneficiaries Served Under MCH Program

AGENCIES	1990	1991	1992	1993	1994	1995
<b>ADRA/OFASA</b>						
Beneficiaries (000s)	41	43	43	26	47	48
Percent of Total	7%	6%	5%	3%	6%	8%
Food Distrib. (MT)	4.8	6.2	5.6	4.5	5.7	4.7
Percent of Total	20%	19%	14%	11%	15%	16%
<b>CARE</b>						
Beneficiaries (000s)			24	25	30	28
Percent of Total			3%	3%	4%	5%
Food Distrib. (MT)			2.2	2.3	2.7	2.5
Percent of Total			6%	5%	7%	8%
<b>CARITAS</b>						
Beneficiaries (000s)	69	183	230	229	192	150
Percent of Total	12%	25%	25%	29%	26%	25%
Food Distrib. (MT)	3.6	9.8	12.3	12.3	10.2	8.2
Percent of Total	15%	30%	32%	30%	27%	28%
<b>PRISMA</b>						
Beneficiaries (000s)	487	512	599	515	478	362
Percent of Total	81%	69%	67%	65%	64%	62%
Food Distrib. (MT)	15.3	16.6	18.6	22.0	19.0	14.2
Percent of Total	65%	51%	48%	54%	51%	48%
<b>TOTALS</b>						
Beneficiaries (000s)	597	738	896	795	747	588
Food Distrib. (MT)	23.7	32.6	38.7	41.1	37.6	29.6

Source: AERs

It will be noted that PRISMA assists nearly two-thirds and CARITAS one-fourth of the total beneficiaries. ADRA/OFASA provides the largest rations, PRISMA the smallest (reflecting that a large share of the PRISMA program is to support pre-school children in an institutional situation).

## II. ADRA/OFASA'S MATERNAL-INFANT CENTERS

### A. PROGRAM DESIGN AND IMPLEMENTATION

ADRA's MCH effort, called "*Centro materno infantil*" (CMI), has gone through two stages during the period evaluated, and has recently moved into a third phase (1996-2000). Phase 1 (1990-1993) utilized limited

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beneficiary selection criteria, with ADRA/OFASA largely responding to demands to their regional centers. The program served mothers and children under 6 years of age by establishing centers to serve a grouping of 60 mothers. Graduation from the program automatically occurred when children turned 6 years old. During this period, ADRA had centers in Juliaca, Arequipa, Lima, Trujillo, Cajamarca and Chiclayo. In 1993, an internal evaluation indicated that mothers were "lending" their children to other mothers so they could participate in the program and that participants were also participating in other food distribution programs.

Given the results of the evaluation and budget reductions, ADRA/OFASA revised the program to improve targeting of resources to the poorest of the poor. To improve beneficiary targeting in the Phase 2 (1993-1995) program, the poorest regions and departments in the country were identified by using the poverty map/table in which the districts of highest poverty have been identified. Communities and high-risk beneficiaries within the district were identified through a community health diagnosis process, which includes a census or baseline survey. This stage of the program was carried out in six cities: Huancayo, Ayacucho, Piura, Lima, Chiclayo, and Cusco. Of these, only Cusco and Ayacucho have a large number of districts on the extreme poverty list.

The revised program included the following elements:

- ▶ community contributions of 50 percent of the needed resources to the CMI program. Its contributions included five locales (commodity warehouse, areas for three child-care centers, a local meeting place), an association or *directiva* to provide guidance, and taking responsibility for commodity distribution.
- ▶ use of community agreements (*convenios*) to clarify the community role in the program. ADRA signed agreements with the community for project development and for materials loaned. In addition, agreements have been signed with the Ministry of Health (MOH) and the Ministry of Education (MOE) at the central level.
- ▶ an integrated and intense (six hours a week, two days a week) educational approach, using participatory or informal teaching methodologies in the areas of nutrition, health, home administration and early childhood stimulation (*estimulacion temprana*). Training sessions were focused on the total family, with priority on the mother and the malnourished child.
- ▶ active participation of community volunteers: two promoters to give health and nutrition training to the mothers and organize the weighing of the children, three educators to work with the children in the three centers (organized by age group), one *orientadora* to work with the mother in household management and how to use the donated food. The volunteers receive food for work rations.
- ▶ central level and regional technical teams, made up of a nurse and a nutritionist, to provide assistance in areas of administration, program planning, implementation and evaluation.
- ▶ coordination with the MOH and other public and private sector agencies working in primary health care.
- ▶ beneficiary graduation after the completion of 20 months in the program. It is programmed to graduate communities from the programs after 5 years.
- ▶ a manual information system.

In 1996, the program was modified to eliminate the children's centers and to provide support only to children under three years of age. The work with the children is now carried out in their homes. The monthly supervision system of the 1990-93 program was replaced by a stricter system of supervision, calling for immediate correction of problems identified.

The food ration varied during the period. During the first phase (1990 - 1992), the ration was 14 kilograms per qualified person per month, with those qualified being the number of children under five years of age and pregnant

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or lactating mothers. From March 1993 to April 1995, the ration was 35 kilograms of food per family. Because of a reduction in overall food resources available to ADRA, the family ration was reduced to 25 kilograms. The volunteers received food for work rations as follows: 68 kilograms for promoters in 1990-1992, 60 kilograms in 1993-1994; 34 kilograms for educators and *orientadores* from 1990 to 1994. Because of ill will generated by the differentiation between the two types of volunteers, the same ration was made available to all volunteers in May 1995. This amount (44 kilograms), however, was such a reduction for the promoters that a number of them quit.

ADRA activities to focus on sustainability include: (1) training and educational opportunities to change knowledge, attitudes and practices; and (2) help to families for increasing income generation, thereby improving access to food security. However, the full benefit of (1) is not obtained because no materials are left in the community with the completion of ADRA support. In addition, the training in cooking focuses on the donated foods; it does not include ideas for improving the use of appropriate local foods in the diet.

## B. TRAINING AND EDUCATION MATERIALS

The training of personnel in administrative operations happens on the job. An administrative guide/manual was developed in 1994.

In 1992 ADRA began the process of planning program operations through the use of annual workshops. Technical training sessions are conducted twice a year for central and regional level personnel. Technical teams interviewed indicated they had attended seven of the nine training sessions conducted over the course of their time with ADRA.

Promoters receive five days of training initially. Subsequent training opportunities are provided on an as-needed basis. During the 1990-1995 period, 8,825 promoters were trained. The evaluation team found that the community promoters were young, enthusiastic and dedicated. They actively participate in program implementation and are vital in reaching goals and objectives. They visit health establishments on a continuous basis looking for education materials in support of their activities. Beginning in 1995, separate training manuals became available for nutrition and for health.

During the 1990-1995 period, 62,873 mothers received training. Beneficiary training sessions are conducted twice a week for three hours. The majority of the sessions planned cover nutrition and health education topics using flipcharts or laminated support materials. In both Chiclayo and Cusco, evaluators observed sessions and/or materials on nutrition. The content observed was overly technical and abstract in nature. ADRA is aware of this and is making changes in their training programs.

More detailed information on ADRA training programs can be found in Volume II of this evaluation.

## C. PROGRAM ADMINISTRATION, SUPERVISION AND MONITORING

The program is managed in the field under the general direction of a regional director. For the MCH program, there is a technical team of supervisors including a nutritionist and a nurse. The activities are carried out entirely by volunteers. Regional offices are responsible for providing resources and logistics for their operation.

The technical teams or supervisors are professionals hired and paid by the program. There are 44 supervisors throughout the country, of which 42 are women. The majority of them are graduates from *Union Incaica*, the Adventist University, and all of them belong to the Adventist Church.

Volunteers of the program were selected based on various criteria, following a lengthy process that included tests and personal interviews. Candidates had to be resident in the community, have some influence therein and the authorization of their husband or parents. Outreach workers were expected to have completed primary school and educators should assume a minimum commitment of two years.

It was reported that the allocation of central funds at a regional level was often delayed, causing difficulties in the implementation of programmed field activities. These delays not only affect the normal development of activities, but also limit the chance of spending the funds when they arrive at the end of the fiscal year.

The MCH Program has no computerized information system in the field. The information has been processed by hand in regional offices since 1990; the consolidated data is remitted from there to the main office.

More detailed information on the administration of the ADRA MCH program can be found in Volume II of this evaluation.

#### D. ACHIEVEMENTS AND IMPACT

During the six-year period of the evaluation, ADRA has worked with nearly 110,000 at-risk children; 75 percent of them have shown positive results. According to the records at the sites visited by the evaluation team, the percent of children showing weight gain varied from 73 percent to 93 percent, with the average for the four sites (two of which with two different time periods) being 85 percent (Attachment 1). ADRA has also promoted immunization, achieving an average of 88 percent over the period, going from 55 percent in 1990 to 96 percent in 1995. The rate for the two sites visited by the evaluation team which had records were 93 and 90 percent (Attachment 1). The evaluation team met with two focus groups of mothers with children in the ADRA program; 17 of 20 mothers (85 percent) said that their children had completed their vaccinations (Attachment 2).

The immunization rate for pregnant mothers has risen from 57 percent in 1990 to 91 percent in 1995, with an overall average of 68 percent for the period. In the mothers' focus groups, 19 out of 20 (95 percent) said that they had had their tetanus vaccination (Annex 3). By promoting immunization of pregnant mothers and other pre-natal care, the number of under-weight births has been minimized. In 1993, the year with the highest number of low-weight births by ADRA-supported mothers, 94 percent of the babies were born with adequate weight. The figure in 1995 was 99 percent.

While the foregoing are very positive achievements, the data in Attachment 2 on mothers' attitudes about the nutritional care of infants suggests that the nutritional messages about the initiation of breastfeeding and its exclusive use as a source of nourishment during the first six months of a baby's life have not been accepted. Thus, the long-term impact of the program can be strengthened. Impact was also negatively affected by the fact that no training materials were left with the community when ADRA terminated its activity. In Piura, the volunteers ceased all activities, but in Cusco there was some continuity of action. In some communities, mothers continue to meet, with the participation of outreach workers who take turns to attend the meetings. Supervisors also visit. Weight control continues in some communities, and health materials are obtained from different sources. The better impact in Cusco may represent the stronger community organization there.

More information on the attitudes and practices of beneficiaries and the social impact of the CARE program can be found in Volume II of this evaluation.

#### E. CONCLUSIONS

1. ADRA has taken steps to improve program design, targeting and implementation over the past five years. Program efforts (population, community and beneficiary selection, program design and implementation) are comprehensive in nature and consider the needs of the community and individual families. ADRA has learned to allow for flexibility to meet the needs of the communities.
2. The organizational climate in ADRA is excellent, with lots of communication. The MCH operational level was found to be efficient, effective and demanding — they produce. Communications with other agencies was found to be good.

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3. ADRA's approach is sound. It uses an integrated educational program covering four modules (nutrition, health, home administration and early childhood stimulation). It places emphasis on complementary programs that support MCH activities and incorporate entire families into the program. It makes good use of community volunteers and community leaders in attaining program goals and objectives. It has done a good job in selecting, training and motivating the community volunteers; it supports them well with the regional and central level technical teams. Its shortcoming has been in the preparation of the communities for the termination of the food assistance.
4. On a macro basis, the impact of the ADRA program is quite small, given that it is reaching only about eight percent of the total maternal-child beneficiaries under the Title II program. At the micro level, the impact has been mixed: some very positive achievements, but not all are likely to be sustainable (see Achievements above).
5. Some actions for ADRA consideration for improving the effectiveness of its CMI program include:
  - ▶ Simplifying further the process of community diagnosis in the selection process.
  - ▶ Simplifying the content of promoter and beneficiary training programs, focusing them more on the needs of the group receiving the training. The use of special and scientific terminology should be avoided. What is taught to promoters does not necessarily apply to beneficiaries. Promoters may need more background information on a subject, whereas beneficiaries need to receive simple messages that will result in the appropriate behavior.
  - ▶ Reducing the number of hours dedicated to training programs. Perhaps with less technical information to share, the amount of time spent in training and education sessions will naturally be reduced — and more effective.
  - ▶ Providing more training to promoters in adult teaching methodologies.
  - ▶ Ensuring that education and training materials are received in a timely manner and in sufficient quantities prior to training and educational opportunities.
  - ▶ Leaving a set of educational and training materials in the community following training programs to facilitate sustainability and continuity of efforts.
  - ▶ Developing recipes using locally available foods to help beneficiary families become less dependent on Title II commodities and facilitate graduation from the program.
  - ▶ Field-testing, analyzing and revising messages to ensure that they meet the needs of the target audience.

### III. CARE'S WAWAWASI AND NIÑOS PROGRAMS

#### A. PROGRAM DESIGN, IMPLEMENTATION AND ACHIEVEMENTS

The economic and terrorist crisis of the early 1990s affected CARE's programming. CARE offered assistance to the GOP in the organization of an Emergency Social Program, and worked with counterparts to establish technical criteria for program beneficiary selection to make sure commodities would not be used for political gain.

CARE's agricultural production efforts were affected by bad weather in 1990 (drought, cold and hail storms). Wawawasi centers, dependent on agriculture production, were most affected by these conditions in the areas visited by the evaluation team (Piura and Puno).



CARE's MCH programs have gone through three stages over the period evaluated: Wawawasi program (1989-1993), Niños I (1993-1995) and most recently Niños II (since October 1995). Since Niños II began at the end of the evaluation period, it is not discussed below. Niños I is referred to below simply as Niños.

### *1. Wawawasi*

Wawawasi began as a pilot in 1989 to improve the nutritional status of pre-school children (3-6 years). It was a direct feeding program using locally available foods for nutritional recovery. Funds from monetized Title II commodities were used for the purchase of local foods until the agricultural component of the project could provide the needed food. The food was prepared at the center and served as lunch to the pre-schoolers.

The pilot experience was evaluated in 1990, and it was decided to expand the target group to 0 to 5 years of age, and to include in the project Ministry of Education promoters to provide early childhood stimulation. The project provided some infrastructure for the centers, storage and kitchen. The Wawawasi program was carried out in the departments of Puno, Ancash, Piura and Cajamarca. The objectives were to:

- ▶ support Wawawasi centers that would continue providing nutritional rations to the community's pre-schoolers after CARE terminated its assistance;
- ▶ have 100 centers operating on a self-sufficient basis by the end of the project;
- ▶ have 90 percent of the project monitors and 80 percent of the participating parents able to monitor the growth of their children by the end of the project; and
- ▶ promote the inclusion of Wawawasi strategies in the regular operations of governmental institutions.

The program worked with the MOE, MOH and local communities. MOE personnel (PRONOEI) were responsible for managing centers, while beneficiary families provided land for agricultural production and labor for gardening and food preparation. CARE provided seed and other equipment, agricultural technical assistance and local foods until the agricultural production component started producing.

Approximately 160 Wawawasi centers were established, of which 100 in the department of Puno. Characteristics of the Wawawasi centers were:

- ▶ Wawawasi centers were managed by an employee of MOE-PRONOEI (animador in Piura) or a promoter (in Puno) and an association of parents. In Puno, promoters received small stipends for their efforts.
- ▶ Center heads/promoters had many responsibilities in addition to their regular responsibilities with PRONOEI. To manage the Wawawasi, they organized agricultural efforts with participant fathers, coordinated food preparation with mothers, weighed and measured children monthly, provided educational programs, and filled out appropriate center documentation.
- ▶ promoters had so many responsibilities they had little time to work with mothers.
- ▶ attendance varied from center to center and from year to year.

In May 1993, CARE evaluated the Wawawasi project. While there had been some advances in infant nutrition and community motivation for proper feeding of their children, CARE concluded that the project had serious limitations in the design of the project and in its implementation strategy:

- ▶ Because of the institutional location and limited resources, most of the emphasis was on the 3 to 5 age group rather than the 0 to 3 group which was the most vulnerable.

- ▶ The operational responsibility for the centers fell to the promoters from PRONOEI (Ministry of Education unit charged with pre-school early childhood activities) who were charged with carrying out the Ministry program and had little time for controlling the work of the project.
- ▶ The chances of attending to the 0 to 3 age group were limited, particularly in rural areas, because of the dispersion of houses and the fact that the mothers did not bring the small ones with them regularly when they came to the center.
- ▶ The sustainability of the agricultural reserve fund for providing food for the center was not feasible because of the limited number of people committed to contributing to it.

CARE's conclusions were substantiated by the findings of the evaluation team. In Piura, the evaluation found that families left the project in Laynas when their children started going to school, and new families showed little interest in participating in the center. In Potojani Chico in Acora District of Puno, CARITAS, which had provided some assistance to the community before the Wawawasi project was established, offered to resume assistance when CARE discontinued its support to the Wawawasi; the community decided to accept this assistance rather than continue with the Wawawasi activity.

The evaluation team was unable to obtain data on the achievement of the other objectives of the Wawawasi program, but it seems unlikely that the parents would be able to monitor their children's growth because the promoters apparently were so over-loaded with MOE work and other aspects of the CARE project that they had little time for working with the mothers. Perhaps for the same reason, the MOE has not incorporated the Wawawasi activity in the Ministry's regular program.

## 2. Niños

As a result of its evaluation, CARE redesigned its child nutrition activities in 1993. The new project was named *Niños*, a Spanish acronym for Sustainable Child Health and Nutrition Project. *Niños* began in 100 rural communities. Its purpose was to target malnourished children under five years of age, with special emphasis on the less than three years age group.

*Niños's* focus was to reduce chronic malnutrition through community training by CARE-trained and paid extensionists in nutrition education and child survival interventions. Efforts included home visits to improve basic community infrastructure. Local foods were cooked by women. Food was used as an incentive to encourage families to participate in educational opportunities.

Beneficiary selection criteria included the following: (a) communities had to be rural, located in extremely poor districts, have a minimum of 30 children under the age of 5, and have no ready access to a health establishment (but within two hours walk of one); (b) no other NGO was providing MCH programming; and (c) the community could not receive food programs from other institutions. The community also must be organized minimally, be interested in the project, and have a non-migratory population. Sixty centers were established in Puno department, 20 in Huaraz (Ancash), and 20 in Piura.

The *Niños* program included three phases in the communities: (1) preliminary implementation - 3 months; (2) project activities conducted - 16 months; and (3) community graduation - 3 months.

During phase 1, a baseline survey or demographic and nutritional census was conducted. In addition, agreements were signed with the community and training of personnel occurred. Agreements were also signed with the MOH and other cooperating agencies or groups to clarify issues of implementation and responsibilities.

Phase 2 included: (a) beneficiary training, held during educational meetings, home visits and feedings; (b) health and nutrition surveillance, conducted during home visits and anthropometric measurements; and (c) community monitoring, supervision and evaluation from the central level (trimestral evaluation at the regional level).

Selection criteria were not always followed; e.g., evaluators found that some communities in Puno were not excluded from other NGO programs.

Locally grown food was prepared and distributed during monthly sessions (both educational and growth monitoring). Cooked rations served as a demonstration tool to teach basic nutrition. Beneficiary mothers took turns cooking rations, and the women were required to contribute firewood and other complementary foods to the activities. Cooked rations provided during the monthly sessions served as an incentive to attend educational opportunities.

The overall goal of the project was that: "by September 1997, 6,000 children under 5 years of age would have had significant and sustained improvement in their nutrition and health through improved knowledge and practices of their 6,000 mothers and the collective effort of 100 rural communities in Puno, Piura and Juaraz."

CARE evaluated *Niños* in July-August 1995 (*Proyecto Niños — Evaluacion de Impacto, Setiembre, 1995*). Field work was carried out in Piura and Puno. The CARE evaluators reviewed the data on malnutrition for the two project sites, in comparison with the time of the basic survey in the community. The results were as follows: Puno 5.2 percent, a decline of 52 percent; Piura 13 percent, a 13 percent reduction. The evaluators concluded that the reason for the greater improvement of the situation in Puno is that the people there have parcels of land on which they can grow some of their food needs. In Piura, on the other hand, most of the population are non-salaried, occasional workers in agriculture with no land of their own.

The IIN evaluation team looked at the percentage of children in the CARE project that showed weight gains. The results were similar. In Piura, 80 percent of the 212 weighings had shown gains; in Puno, 90 percent of the 224 weighings showed gains (Attachment 1). The better showing in Puno could also be impacted by the closer tie-in of project educational activities with community activities and, according to the CARE evaluation, a greater interest of the men in Puno in the nutrition of the children.

Both evaluation groups also looked at the level of immunization of the children, the improved coverage of which was an element of the CARE project. The CARE evaluators stated that the level of coverage had increased 18 percent in Piura, while the coverage in Puno had stayed about the same, with the coverage for some diseases actually falling. The IIN team found a 79 percent coverage in Piura and 51 percent in Puno.

The CARE evaluators suggested that the differential between the two departments reflected a positive situation in Piura and some negatives in Puno. In Piura, a high level of immunization before the project started made it easy for CARE to work with the Ministry of Health to maintain and augment the coverage. The CARE evaluators thought that the static situation in Puno might be due to: (a) cultural factors, which are reflected in a negative attitude toward some immunizations; (b) a greater dispersion of the population, which limits the success of mass vaccination campaigns and the access of the population to health facilities; and (c) the vaccination schedules of the health centers, which are not always adapted to the patterns of community life.

With regard to the knowledge, and use thereof, of educational messages, the picture was somewhat mixed. The CARE team found that the women that participated in focus groups had good knowledge of the appropriate care of their malnourished children and an adequate management of acute respiratory infections and diarrheal disease. The point was made that educational messages have little impact on the morbidity from respiratory infections. The IIN team obtained data only in Puno and this bore out the CARE findings, except for a lower score for taking care of diarrhea (Attachment 2). This appears to reflect cultural factors to a considerable degree.

While there appears to be some room for improvement in the knowledge, attitudes and practices of the women in preventing and/or treating early childhood diseases, it should be noted that the women participating in the project scored much higher than control groups that had not participated in the project. According to the CARE evaluation, 75 percent of the project women gave good answers on questions of how to deal with respiratory diseases, diarrhea and malnutrition, compared to only 15 percent of the control group.

## B. TRAINING AND EDUCATIONAL MATERIALS

CARE's training and education methodologies and materials were found to be dynamic and motivating; the agency utilizes an informal adult education methodology. CARE provides training opportunities to regional teams (representative, assistant and four extensionists) throughout the year. The teams interviewed considered the training to be acceptable and dynamic. The training received included national and regional opportunities in health, nutrition, and techniques in adult education. Visits were made to other project areas to learn how other Niños programs function.

Training materials are developed to be used with low literacy audiences. Flipcharts contain no written messages. Short, simple messages on the back help guide promoters and extensionists to provide concise messages to program beneficiaries. In spite of the good quality of much of the training materials, the training to beneficiaries contains too many messages; in some cases, information is abstract and overly technical. Programs did not always respect traditional beliefs and customs.

In one case, extensionists complained that needed materials did not arrive in time for the planned training activity. The extensionists develop their own materials, based on those from headquarters, because of the need to put the materials in the local language (e.g., quechua, aymara).

During *Niños I*, promoters, who were volunteers, did not receive training opportunities and were considered assistants to extensionists. Thus, when CARE phased out of an area at the end of 1995, the promoters had limited capability to carry on the activity in the community. They were able to continue with limited activities in the Puno area where the CARE activity had been more integrated with community action.

More detailed information on CARE training programs can be found in Volume II of this evaluation.

## C. ADMINISTRATION, PLANNING, MONITORING

Detailed information on the planning, management, supervision and monitoring of CARE children's support programs is found in Volume II of this evaluation. The major findings are mentioned below.

CARE programs generally were seen as well planned, efficient and well organized. Some field people felt, however, that there should be some room for flexibility in helping the community deal with immediate health needs. For example, both the health component and the administrative controls did not allow for dealing with malaria, tuberculosis and parasitosis.

CARE incorporates evaluations as a part of the design of their activities. Hence, evaluations are conducted on a regular basis. During *Niños*, evaluations were conducted half way through the interventions phase in the community.

A computerized information system was functioning at the regional level. It was at this level that the information prepared manually in the field was consolidated and integrated into the system.

## D. PROGRAM IMPACT

On a macro basis, the impact of the CARE program is quite small, given that it is reaching only about five percent of the total maternal-child beneficiaries under the Title II program. At the micro level, the impact has been mixed: some very positive achievements in the *Niños* activity (see section A above), but not all are likely to be sustainable. While CARE left promoters with equipment (a scale and a heightmeter) and training materials when activities terminated, virtually no follow-up work was carried out in Piura. In Puno, because of the strong community organization, weighing activities continued and the promoters continued to give some talks. However, these were limited, without supervision and not updated. The problem is that CARE focused its training on the

extensionist, who was paid and left to take other employment when the activity terminated, while the volunteers received little training and were seen primarily as facilitators for the work of the extensionists.

More information on the attitudes and practices of beneficiaries and the social impact of the CARE program can be found in Volume II of this evaluation.

#### E. CONCLUSIONS

1. CARE's *Niños* program is efficient and organized. Personnel are well qualified, and they take pride in their work and pride in CARE as an organization. CARE has been successful in creating a "mistica" that favors working for the organization. On the other hand, there has been a significant turn-over of extensionists in areas where new health facilities have been established (or re-established), and the CARE salaries were not sufficiently competitive.
2. Program design includes specific goals and objectives. Implementation is organized in detail right down to the minute, which does not allow for flexibility on the part of the extensionist. The training focus seems to be too much on the paid extensionist and not enough on the community volunteer promoters.
3. Evaluation is a strength of CARE. Personnel perceive evaluation as an opportunity to improve programs. The extensionists are open to the evaluation process and are ready to change. Promoters are motivated and interested in work.
4. Supervision systems work. Program monitoring happens, and a general interest in improving programs exists.
5. CARE's work with mothers (often in groups) helps reinforce the important role that women play in Peruvian society.
6. Some actions for CARE's consideration for making its *Niños* program more effective, at least in the sites visited by the evaluation team, include:

Graduating communities from programs gradually and in a more flexible manner, taking into consideration the needs of the community.

- ▶ Adding *botiquines* (small pharmacies) to increase services to programs.
- ▶ Training and operating more with promoters.
- ▶ Allowing extensionists the flexibility to respond to the needs of the community.
- ▶ Promoting attitudes of understanding and respect for traditional beliefs and not consider and treat them as "erroneous beliefs," especially in Piura.
- ▶ Avoiding excessive use of medical and technical terms when working with promoters and beneficiaries during training and educational opportunities.
- ▶ Simplifying the extensionists training manual and providing qualitative and quantitative evaluation information to them to increase their understanding of why accurate data need to be collected and how it is used in decision making.
- ▶ Evaluating the classification of basic nutrition education and, in conjunction with other agencies operating Title II programs, determine what methodology would be best in presenting this topic (banquito or other).

## IV. CARITAS'S CHILD SURVIVAL PROGRAM

### A. PROGRAM DESIGN AND IMPLEMENTATION

CARITAS has provided emergency efforts to needy areas of Peru during 1990-1995. In 1990 Title II foods provided relief to those effected by the economic crisis. During 1991-1993 terrorist action limited programming in some CARITAS dioceses and suspended others (Huancane in Puno and Huarmaca in Piura). The cholera outbreak of 1991 affected Child Survival programming. CARITAS joined with the Ministry of Health (MOH) and established an emergency program to provide medicine packets, de-contaminated water, community agents and services to communities.

CARITAS's MCH programming occurs through its Child Survival Program (*Programa de Supervivencia Infantil - PSI*). The PSI was initiated in 1987 with the objective of:

"contributing to the prevention of malnutrition and improving the nutritional status of children of the most vulnerable age group, monitoring their growth through monthly weighing and training their mothers in food, nutrition, health and hygiene."

The PSI became a national program in 1990. Some summary data on the PSI during the evaluation period is provided in Table B-2 below.

TABLE B-2

CARITAS's Child Survival Program, 1990 - 1995

DATA ELEMENT	1990	1991	1992	1993	1994	1995
Dioceses participating	17	30	36	39	39	39
Supervisors employed	25	53	74	83	83	83
Children Monitored (000s)	10.6	29.1	49.8	61.3	111.3	110.0
Promoters participating	n.a.	2,112	2,119	3,500	3,381	3,300
Centers participating	n.a.	1,056	1,943	1,992	2,177	2,177

The target population for CARITAS support varies by diocese and by parish. General program directives exist at the central level for the selection of beneficiaries; however, criteria developed locally are often given more emphasis. In Piura, population selection occurred in response to recommendations of community teams which took into account child malnutrition levels, accessibility of communities and general level of poverty in the community requesting. In practice in the diocese of Chulucanas, the site visited by the evaluation team, the parish teams used their own criteria to select participants. The program works with the 60 neediest families in a selected community, focusing on children under six at risk, mothers and poor families.

In Juli, CARITAS officials said that central level directives were used to select beneficiaries. The poverty map was used to identify and select the poorest of the poor communities located in remote areas. The programs of the prelate of Juli, which was visited by the evaluation team, are primarily located in Aymara rural communities in three different ecological zones: lower elevation near the lake, with a greater variety of cultivation; the high Andean zone far from the lake, depending on livestock and dry land crops; and an intermediate zone.

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Food aid is considered a fundamental program by some local dioceses to reach the most difficult geographical areas; other dioceses consider it less important. In Chulucanas, Title II foods are used to get families into nutrition and health education opportunities, while in Juli Title II commodities are not used in PSI programs because of the concern that food donation programs create dependency. However, program beneficiaries have access to other food aid from programs such as PRONAA, PACFO and CARE.

Implementation often occurs through existing mothers' clubs. Agreements (convenios) are usually established with each community for the implementation of activities. Other modalities of implementation will vary by diocese.

In the Diocese of Chulucanas, PSI efforts are implemented by Villa Nazareth Center and reach areas not covered by MOH programs. Program implementation is coordinated with community leaders and other organizations (women's clubs, schools, etc.). Promoters are elected from the community; they often have other responsibilities in the parish.

In Juli, where the PSI was initiated in 1993, child survival programming is implemented by community promoters, who are trained in health and nutrition topics, anthropometric measurement of children, and program information systems.

Beneficiaries of programs visited in Chulucanas and Juli had access to other support programs such as MISEREOR, CRS, UNICEF, CEAS, DEPAS, etc. Thus, it was not possible for beneficiaries to identify sources of assistance. Similarly, it would not be possible to attribute changes in child malnutrition to any particular program. In Juli, for example, the "Program Suizo" was initiated in the same area as the PSI; the Program Suizo is attempting to develop integrated projects, with diverse production activities and training.

## **B. TRAINING AND EDUCATION MATERIALS**

Training programs include central and regional level opportunities. Central training sessions are held twice a year, while regional opportunities are conducted four or five times a year. Training programs include evaluation components. Information is reinforced during supervisory visits (conducted twice a year). Local dioceses are responsible for training programs in their geographical area.

The majority of training sessions provided to promoters and CARITAS personnel responsible for child survival programming are based on MOH program norms (diarrhea, respiratory infections, growth monitoring, etc.). Other programs and agencies are consulted for the development of programming in the areas of child feeding, malnutrition, growth and development, growth monitoring, etc. Program content is approved by CARITAS/Peru, but adapted by local dioceses to meet the needs of the communities being served. In addition, promoters are given the opportunity to request training opportunities in areas they need.

MCH technical promoter manuals and cloth flipcharts are available to individual dioceses for child survival programming, but they are not always found in the field. Individual dioceses' programs are responsible for developing educational support materials such as posters, other flipcharts, slides, etc.

In the training sessions with the beneficiaries, a large number of messages are presented, some of which are very abstract; technical terminology is often used. It was suggested in Chulucanas that the teaching of a limited number of messages is more functional for obtaining an acceptable comprehension. Both areas visited cited a lack of some educational materials, and in some cases, late arrival of materials.

## **C. ADMINISTRATION, SUPERVISION, PLANNING**

Supervision of child survival programs by CARITAS/Peru (central level) occurs at least once a year. A lack of financial and human resources is given as the reason for not having more frequent supervision visits. Regional program directors complete approximately nine monthly supervisions per year. Promoters are supervised by local CARITAS personnel on a monthly basis. Supervision in remote areas is more limited.

Between 1993 and 1994 CARITAS worked to improve its monitoring systems of malnourished children. It uses anthropometric measurements of weight for age to determine the level of malnutrition of children during the period a child is being monitored. Quality control of the data is not carried out on a systematic basis.

CARITAS's information system was developed in 1991. Implementation occurred in 1993; in 1995, CARITAS began revising the system based on difficulties found. The evaluation team found deficiencies in data collection and management of information and inconsistencies in the categorization of the nutritional status of children (e.g., in Chulucanas). The responsible officials said that it was not possible to determine whether the problem was inadequate field data having been put into the system or a faulty program being used for the inputting of data. Some of the CARITAS field staff had limited knowledge of how and why the information system is utilized and needed.

The information system used for the flow of food aid and for other management decisions seemed to be operating efficiently. Field personnel had no complaints.

#### D. PROGRAM IMPACT

On a macro basis, the impact of the CARE program is significant, given that it is reaching from 25 to 30 percent of the total maternal-child beneficiaries under the Title II program. There are 2,177 centers operating PSI programs in 39 dioceses throughout the country. A comparison of CARITAS activity by district in the departments which have more than 10 districts on the extreme poverty lists shows that CARITAS is operating in more than half of the "extreme poverty" districts. These departments include Loreto, Huanuco and Arequipa where neither CARE or ADRA operate.

On the micro level, the evaluation team looked at the percent of children showing weight gain in Chulucanas in Piura Department (72 percent) and two centers in Puno department (92 and 93 percent). The figure for Chulucanas represents data for the whole district with over 10,000 weighings; the data in Puno is for a little over 200 weighings for each of the centers. For details, see Attachment 1 and Volume II.

The CARITAS field cards and computerized system does not include immunization data. In the focus group at one of the sites in Puno, 7 out of 10 reported that their children had been completely vaccinated. Nine of the mothers also reported that they had their tetanus vaccination. For details, see Attachment 2 and 3 and Volume II.

Seven out of 10 women in the Puno focus group initiated breastfeeding in less than 24 hours. Discussions indicated that this was not so prevalent in the Piura area. Even in Puno, other messages about infant feeding and the treatment of diarrhea did not conform to the messages the agencies are giving. This suggests that the information, education, communications (IEC) activities are not very effective or there are some strong cultural factors needing attention.

Interviewees in Juli (Puno) thought that there had been a permanent transfer of knowledge and that there was a commitment within to the improved attitudes and practices. In Chulucanas, it was assumed that the health center Villa Nazareth would pick up the CARITAS activities if the latter terminated its support. It is not clear, however, that there would be the same participation there without the availability of donated food.

#### E. CONCLUSIONS

1. CARITAS effectively provided emergency relief (educational and Title II commodities) during the time period. Emergency programming was provided to areas cut off from public sector efforts; in some cases, this proved to be the only assistance available to sustain some needy populations during times of crisis.

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2. Local CARITAS dioceses plan and implement PSI programs independently. MCH program objectives and selection criteria generally are not clearly specified; implementation varies by diocese. Local diocese PSI program staff need technical assistance from CARITAS/Peru to improve programs.
3. One of CARITAS's strengths is that it can deliver food aid and other assistance to the poorest of the poor living in the most geographically remote areas of the country. However, CARITAS/Peru is considering a move to reduce programs in these remote areas due to the high costs and complicated logistics.
4. Coordination within CARITAS exists to maximize beneficiary coverage, optimize services and provide complementary programs. Inter-agency coordination occurs when possible, given the limited human resources available in CARITAS/Peru to plan and implement programs. Dioceses coordinate with other public and private sector agencies to avoid program duplication.
5. One of CARITAS's greatest strengths is their close working relationship with communities. These relationships allow for effective community-based programming and implementation.
6. Some actions for CARITAS's consideration for making its PSI program more effective include:
  - ▶ Defining the role of the central level health and nutrition technical team and strengthening its capability to provide more assistance to diocese programs.
  - ▶ Strengthening programs at the regional level by providing consistent, standardized technical assistance among all program areas: planning, implementation, evaluation, materials development, training, etc. Suggestions on ways to achieve this include:
    - (a) assist dioceses develop specific objectives to help streamline and direct PSI efforts.
    - (b) identify dynamic and effective PSI models and strategies currently existing within CARITAS and promote improvements based on the model/s identified.
    - (c) develop specific beneficiary selection criteria and methodologies for improving targeting of resources to the poorest of the poor.
    - (d) consider the use of agreements (convenios) at all levels (central, regional and with the communities) to strengthen programs and community participation and to clarify program objectives and operations.
    - (e) promote programs targeted to reach the poorest of the poor located in remote areas of the country through the use of creative program approaches, e.g., through the use of monetized resources to increase the level of training of local people and contracting locally for food for use in demonstration programs.
  - ▶ Improving training and education materials and their use:
    - (a) assist dioceses to improve their training practices by identifying and promoting dynamic training programs and participatory methodologies found in the dioceses.
    - (b) promote the use of evaluation instruments (for example, pre and post tests and/or behavioral checklist) to assess the level of knowledge gained from training and educational opportunities provided.

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- (c) improve the distribution of promoter's manuals and other support educational materials. Consider development of an inventory of educational materials (e.g., promoter's manuals) found in the dioceses and distribute materials to MCH programs that need them.
  - (d) simplify training materials by: i) reducing the number of educational messages given; and ii) improving the technical content (infant feeding: consumption of "calostro" is recommended, "aguitas" and use of baby bottle is not). Messages should be prioritized by level of importance and be realistic in terms of performance.
- Improving coordination between CARITAS/Peru and regional diocese offices, as well as with other public and private sector agencies conducting PSI programs.
  - Training personnel at regional and diocese level in the management and use of the PSI information system.
  - Strengthening program budget and human resources dedicated to the supervision and monitoring of the PSI programs.

## V. PRISMA'S MATERNAL AND CHILD HEALTH PROGRAMS

PRISMA, a local non-profit agency, started operations in 1986 conducting operational research to look at risk factors contributing to child malnutrition and death in poor slums (peri-urban) of Lima and rural areas of Cajamarca (sierra). MCH programs implemented during 1990-1995 include PANFAR and Kusiayllu (described below), both of which are implemented in conjunction with the MOH, and support to pre-school institutions such as pre-school education centers (CEI), non-graded pre-school education program (PRONOEI), and the family-based early stimulation program (PIETBAF). The pre-school activities accounted for 48 percent of the PRISMA Title II beneficiaries in 1990, but this dropped steadily over the period to 31 percent in 1994 and 1995. Because of the smaller per capita ration for pre-schoolers, only 20 percent of the Title II food distributed by PRISMA was for pre-schoolers in 1990; this percentage dropped to 13 in 1994 and 1995.

PRISMA's programs have been affected by the social, political and economic crisis felt during the early 1990s. In the 1990 election period and in the following two years, PRISMA experienced pressure to allow food commodities to be used for political gain. PRISMA, in coordination/collaboration with the MOH, maintained program implementation and developed programs even through this time of political change.

### A. PROGRAM DESIGN AND IMPLEMENTATION

**PANFAR** - Programa de Alimentacion y Nutricion a la Familia en alto Riesgo (Food and Nutrition Program for High Risk Families).

PRISMA began implementation of PANFAR on a national level in 1988 in conjunction with, and in accordance with a formal agreement (convenio) signed with the Ministry of Health. The original agreement was for five years and was renewed with an addendum in 1992, extending its term to December 31, 1997. Neither the agreement nor the addendum mention the Kusiayllu program. The objectives of the PANFAR program, according to the agreement, were:

- unify efforts for improving the nutritional status of pregnant and lactating mothers and pre-school children through a program of food supplementation integrated with maternal-infant programs at the community level;

- ▶ integrate the food supplementation program of the Ministry of Health with mother-child activities at operational levels [of the Ministry] and put into operation an effective distribution, supervision and orientation;
- ▶ promote in the general population breast-feeding exclusively until the child is six months of age and provide an adequate weaning food diet from that age; and
- ▶ design a nutritional vigilance methodology at the level of the UDES (departmental health units) which functions as a planning and evaluation instrument in the general population.

To implement the agreement, PRISMA was to provide technical assistance to the Directorate of Food and Nutrition Assistance to carry out a program with the following specific objectives:

1. design and implementation of a national strategy for reaching the families of highest risk;
2. design of a system of nutritional vigilance;
3. training of the personnel of the Directorate of Food and Nutrition to handle the responsibilities assigned to the Directorate by the agreement;
4. care of the malnourished child in the home;
5. monitoring of the distribution of food and supervision of the program for its improvement;
6. design of the system of information and of data control;
7. operational research and coordination with other private voluntary organizations;
8. integration of the family planning and other programs with the food supplementation program at the operational level through adequate technical assistance in the distribution, control and allocation of food; and
9. advice for the implementation of an automated information system based on microcomputers.

The activities established by PRISMA in its latest long-term planning document for implementing its agreement with the Ministry are:

1. implement a risk strategy for selecting families with women and children under six at risk in rural areas, isolated areas of the "selva" (rainforest lowlands) and urban slum areas;
2. distribute monthly a ration of supplementary food that covers no less than 30 percent of the daily caloric and protein requirements for a minimum of six months through a food program integrated with maternal-infantile activities at community level;
3. develop education materials for information, education and communication at various levels and for the different activities of the program;
4. improve local training capacity through the training of teams of regional trainers for PANFAR who will train Ministry of Health personnel responsible for the program at the regional and sub-regional level;
5. simplify the system of registration, reporting and manipulation of existing information in order to facilitate the availability of data for decision-making at all levels;

6. design a community-level nutritional vigilance methodology for implementation in two regions in the second year and in all years in the last year of the project;
7. develop effective relations, in the second year, with other groups involved in programs of food distribution; and
8. supervise and document the operation of the program for the Ministry of Health, with special emphasis on transport, warehousing and distribution.

In accordance with the risk identification strategy developed by PRISMA, high-risk families are determined through the use of a system of ten criteria, including socio-economic (parent's education level, employment situation, family abandonment, number of children in household, birth spacing, persistence of disease, etc.) and anthropometric factors (level of malnutrition of children). If a family has four or more points of these ten elements, it is eligible for inclusion in the program. In practice, the evaluation team found that the nutritional status of children (acute malnutrition) to be the principal factor being used to establish beneficiary status. The team also found that MOH staff were not clear on how best to use the other selection criteria. The team was also told that one health center was requiring 7 to 10 points to qualify.

Program operation involves the following actions:

- ▶ The first stage consists of scheduling health establishments, calculating the number of beneficiary families and determining the storage capacity in each establishment. These tasks are accomplished by coordination between PRISMA and the Ministry of Health. At the regional level, the territorial units (UTES) are responsible, jointly with the PRISMA coordinator. The programming is done on the basis of the amount of donated food previously allocated. When the food is received in the amounts programmed, it goes directly to the UTES with storage facilities or it is left in a central warehouse administered by regional MOH authorities. Each UTES supervisor is in charge of getting the food to the proper health establishments.
- ▶ Twice a year, the selection card is used to decide which families will continue in the program and which new families will be added. Families rating four points or more are included. These tasks are the responsibility of the health personnel in each establishment.
- ▶ Food is distributed to the families once a month. The amount of food delivered, as well as each activity, is recorded on the beneficiary card. This task is the responsibility of each health establishment. The food rations are prepared with the help of the beneficiary mothers. There is supposed to be a poster indicating how much of each food product goes into a ration.
- ▶ Evaluations measure progress and achievements in the implementation of training, application of family selection methodology, number of beneficiaries served, supervisory visits made, training sessions, repeated training, and food movement.

Families are released (graduated) based on the following criteria:

- ▶ No malnourishment during at least three of the six months the family has been served.
- ▶ The children have received all immunizations required for their age.
- ▶ The mother has attended at least three training meetings.

PANFAR began operating out of 2,600 health centers and health posts (national level). The number declined as the security situation forced the government to close some facilities, but the MOH has begun re-opening centers and expanding into new areas. At this time, PANFAR beneficiaries are generally selected (captado) during referrals from other health services offered in the health establishments, as a result of home visits, or from health campaigns. Initially, however, the Ministry was more passive.

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In Piura during the years 1992-1993, PANFAR beneficiaries were simply those who requested participation. The evaluation team was told that this changed in 1993. In Chulucanas, for example, the selection began to shift more towards the most needy. The selection process had to be further refined to accommodate the operational capacity of the health units. A similar pattern existed in Cusco. Whereas the program was largely unknown at first, now the beneficiaries know the answers to give to ensure eligibility. In some cases, they have even kept their child's weight down to ensure continuation in the program.

In Cusco, the evaluation team was told of pressures to allocate the food to all of the population or to use different criteria for the distribution. In some places, a local decision was taken to give PANFAR commodities as a premium to families whose children gained weight to avoid the tendency of some mothers to intentionally keep their children underweight. There were also complaints in Cusco that not enough food was available to cover all of the needs. It was also reported that they had problems obtaining funds from the Ministry to pay for the transport of food and for training and supervision activities.

The distribution of the Title II food is handled by PRISMA down to the level of the Territorial Health Units (UTES) or the Basic Health Units (UBAS). These MOH units are responsible for transporting the food to the health establishments in the selected localities and for its distribution to the beneficiaries.

The evaluation team was told of various types of difficulties encountered in the distribution of the food, some of which were inherent in organizing a new system while others were of a particular period (e.g., political interference and major shake-ups in the Ministry of Health during the early 1990s). The situation has improved since 1993 when PRISMA was able to establish its own regional coordinators. Nevertheless, some of the field personnel that were interviewed stressed the need for better storage facilities at smaller health establishments and for Ministry personnel trained in the logistics of food distribution. They also mentioned the difficulty of reaching remote facilities during parts of the year due to the weather and the status of the roads. PRISMA reports show that in 1995 40 percent of the MOH storage areas do not have platforms to keep the food off the floor, 49 percent lacked Kardex files and 21 percent had rat infestations.

The Ministry of Health PANFAR supervisors are largely *tecnicos* trained by MOH supervisors. Responsibilities include: determining beneficiary eligibility, enrollment, weighing of children, filling out appropriate documentation, providing/facilitating educational opportunities, and distributing correct rations. The field personnel that were interviewed by the evaluation team stated that with the re-assignment of personnel that occurred frequently in the Ministry, a PANFAR supervisor often found that he/she also had to carry out the regular MOH functions as well as those of PANFAR. At the UTES and UBAS level, the administrative obligations of the PANFAR program take up a significant portion of one's MOH duties.

The funding of the PANFAR program is shared between PRISMA (largely USAID funding) and the Ministry of Health. The PRISMA budget, a good portion of which is financed through the monetization of Title II food, is utilized to fund the primary transport costs of the donated foods to central or regional warehouses, for training of personnel of the UDES and UTES and PRISMA regional coordinators, and for the salaries of regional PRISMA coordinators and their supervision and evaluation activities. The cost of the forms for growth monitoring and educational materials are also covered by PRISMA. Occasionally, PRISMA may fund local transport or premiums for MOH personnel.

The Ministry of Health assumes the operating costs of the program at the local level. This includes primarily the budget of the local unit and the personnel assigned to it. The budget includes warehouse costs, secondary transportation fleets or charges, supervision of the program, training of the beneficiaries and infrastructure. Based on the Ministry's Operational Plan for 1995, IIN has estimated that the Ministry contribution is about 60 percent of the resources provided by USAID, with the latter including food and food monetization (both Title II and Title III).

### Kusiayllu (Happy Community)

The program began as a pilot project in 1992 in six urban (semi-rural) communities. Six or more Kusiayllus have been added annually since then; there are currently 32 in the country. Implementation occurs out of MOH establishments.

The purpose of the Kusiayllu program is to improve the nutritional status of children under three years of age in rural and urban slum areas of Peru. Specific objectives are to:

- ▶ establish a nutritional surveillance system at the community level to evaluate the nutritional status of children under three years of age, identifying acutely malnourished children and monitoring their rehabilitation;
- ▶ focus Kusiayllu benefits to families with malnourished children for a minimum of six months;
- ▶ train an average of 50 community members (preferably women) to become health promoters in child survival, growth monitoring and nutritional rehabilitation;
- ▶ train a minimum of four professionals of MOH centers and/or posts at each site as trainers and supervisors of the health promoters;
- ▶ establish a computerized information system at each site to facilitate nutritional surveillance analysis; and
- ▶ improve infant feeding practices in the community.

To be selected for a Kusiayllu center, a geographic area or population must meet the following criteria: (1) must be a rural or marginal urban area of around 15,000 habitants; (2) must be within the orbit of an established health service area which has a supervisor available to work in the area; and (3) malnutrition must be identified as an important health problem.

Beneficiary selection occurs during a population census (anthropometric measures including weighing and measuring) of all children under three years of age. Children found to be acutely malnourished are enrolled in the program.

The Kusiayllu program relies on promoters from the community. The promoters are charged with carrying out an annual census, growth monitoring every four months, monthly training sessions with the beneficiary mothers, bi-weekly follow-up home visits, and participation in the MOH distribution of food. The number of promoters, and their case load, varies considerably according to the findings of the evaluation team. Generally, the promoters are not paid, but the evaluation team found that they may receive a small monetary gift from time to time or, in at least one area, a PANFAR ration.

Although the Kusiayllu program is designed to work in conjunction with local MOH establishments, the funding for the program is virtually 100 percent PRISMA; the MOH does, however, in most cases, provide storage and distribution facilities for the donated food. Kusiayllu is considered even less by MOH personnel as a Ministry program. The evaluation team found confusion at the regional and local MOH establishments as to how PANFAR and Kusiayllu differ — in concept and in implementation. This was particularly keen when both programs were located in the same or a nearby community.

Food aid was viewed as an essential and integral component of PANFAR and Kusiayllu programs on all levels (central, regional and local). Ration levels were initially the same for the two programs (12.5 kilograms per month); however, in 1994 the Kusiayllu ration was doubled, in recognition that the food being provided was being used for more than just the targeted beneficiaries. At the same time, in some areas at least, they began limiting participation in the program to 12 months.

Warehousing and storage of Title II commodities in the field is the responsibility of the Ministry of Health. The coordination of commodity storage and administrative controls were found by the team to be irregular (see discussion above under PANFAR). The local problems have been aggravated at times by the distribution to the local level of too much of one food and not enough of another. This and other problems, as well as a more detailed presentation of the two programs, are presented in Volume II of this evaluation.

## B. TRAINING AND EDUCATIONAL MATERIALS

Training opportunities for MOH personnel were very limited prior to 1989. Hence, the semi-annual training programs instituted by PRISMA were welcomed. Although the training for regional PANFAR supervisors is supposed to include three themes (care of the malnourished child, logistics and completion of forms, and health themes), the evaluation team was told that in the northern region the third theme was generally not dealt with.

Nutrition and health education opportunities happen differently in the PANFAR and Kusiayllu programs. PANFAR beneficiaries receive information and education during visits to health posts or establishments at the time of the distribution of food. Kusiayllu program families receive education opportunities during home visits and visits to the health establishment to pick up donated foods. The evaluation team was told that periods available for educational activities is very limited in the health center visits and that the home visits by the promoters is used primarily for growth measurements.

In general, training and education materials were found to be complicated and highly technical (see Annexes Q and R of Volume II). Formal teaching methodologies are being used. Notable differences were found between the level of knowledge and practices of promoters and beneficiaries. Materials have become available for distribution to the beneficiaries only since 1994.

Details of the scheduling of training, the general structure of the training, and the relative roles of PRISMA and the Ministry of Health in the training are discussed in Volume II.

## C. SUPERVISION AND MONITORING

Both PANFAR and Kusiayllu program monitoring and supervision at regional and local level is primarily a responsibility of MOH personnel. Because of earlier problems within the MOH, PRISMA was able to get Ministry approval in 1993 to hire its own regional coordinators; 17 are now working with the MOH at the regional level. PRISMA coordinators may carry out supervision activities in conjunction with MOH supervisors or independently. Supervision of the PANFAR program by MOH personnel takes place in conjunction with their monitoring of other MOH programs. PRISMA hires MOH personnel to supervise Kusiayllu programs in their off-duty time.

The evaluation team found that the supervision of the PANFAR program by MOH personnel often was inadequate due to their responsibility for so many other activities and the limited financial resources available to them for travel or for purchase of equipment (e.g., scales for weighing). MOH personnel were often found to be over-worked and unmotivated, particularly towards PANFAR activities.

The evaluation team found some tenseness in relations between MOH personnel and the PRISMA regional coordinator in one area and to some degree at the central level. While personalities can always contribute to such situations, it appears that the working conditions of the MOH supervisors of the PANFAR program may also contribute. The MOH appears not to have fully accepted the PANFAR program as a part of the MOH program.

In Kusiayllu, the promoters interviewed said that their supervisors do not provide sufficient feedback to the person being supervised. The supervisory visits do not transpire into learning opportunities for those being supervised.

The program's information system has been developed over the course of program implementation. In 1993 it was computerized at the central level and at some regions. The evaluation team found a detailed manual system

being utilized at the local and regional levels to satisfy PRISMA's needs; at the same time, PANFAR supervisors must complete separate forms for submission to the MOH.

#### D. PROGRAM IMPACT

During the evaluation period, PRISMA provided about two-thirds of the Title II assistance to children and pregnant and lactating mothers, serving on average about one-half million beneficiaries annually. If assisted children were gaining weight about 80 percent of the times they were weighed, as was the case in the evaluation team's sample survey (discussed below), then a very significant amount of malnourishment was rectified or avoided. That, in conjunction with the health and nutrition messages, can be assumed to have resulted in many illnesses being avoided. Improved maternal health and care would have resulted in fewer underweight babies being born.

Another impact of the project has been additional health and nutrition training being provided to Ministry of Health personnel as well as training to community promoters (under the Kusiayllu program). Training of the former can help the MOH system because of frequent transfers of personnel. Training of the promoters can help maintain a higher level of health and nutrition understanding in the community for an extended period even after the termination of the project.

Lacking a reliable series of health data, the evaluation team attempted to assess the impact of the project by collecting two types of quantitative indicators (record of weight gain and immunization of the participating children) and a number of qualitative factors (knowledge, aptitude and practice of the participating mothers and the impact on the promoters).

In the PANFAR program, the team found that weight gains occurred nearly 80 percent of the time in Chulucanas (Piura) and 98 percent of the time in Oropesa (Cusco). The immunization level was between 83 and 84 percent at the two sites.

At the two Kusiayllu sites visited in Piura weight gains occurred 82 and 83 percent of the time; in Cusco, 80 percent of the time. The immunization rate at the Kusiayllu sites was quite variable: 74 percent in Chulucanas and 100 percent in Curamori (Piura) and 51 percent in Zarzuela (Cusco).

The qualitative factors were obtained through focus groups with participating mothers and interviews of other interested and qualified personnel, including MOH and PRISMA personnel and Kusiayllu promoters. The guides for this work are included in Annex T of Volume II, and the responses for all agencies are included in Attachments 1, 2 and 3 of this annex as well as Annexes L, M and N of Volume II. A list of the principal findings follow:

- ▶ Participating mothers were not clear on the importance of breast-feeding exclusively for the first six months of the baby's life and most had begun feeding their babies prematurely; the exception was Kusiayllu mothers in Cusco.
- ▶ When the mothers introduced other food, there was a tendency to provide a soup rather than solid food, even though in some cases they knew the contrary was recommended. Also, most mothers did not add oil to the baby's food; again, the exception was Kusiayllu mothers in Cusco.
- ▶ The notion of a balanced diet was too abstract for the Cusco mothers. Nevertheless, they had learned to prepare nutritional recipes, both for children and adults.
- ▶ All groups of mothers had a good recollection of the recipes provided for utilizing the donated foods.
- ▶ Most mothers understood that poor hygiene can contribute to diarrhea, but most also ascribed its cause to a number of other things such as the cold, fatigue, jealousy, etc. Treatment with oral rehydration salts (ORS) was commonly used. Most of the mothers also knew that they should not give medicine for diarrhea unless



it had been prescribed by medical personnel. In practice, however, some had given medicine, usually non-prescription.

- ▶ Few mothers could remember the signs of danger for respiratory infections. However, they generally used commercial preparations to treat the problem.
- ▶ Virtually all mothers appreciated the importance of vaccinating their children and themselves.
- ▶ Although mothers generally did not understand the significance of the colors on the growth and development chart, they were aware of the importance of weight changes as an indicator of health.
- ▶ Although they were not always practiced, the women were aware of modern methods of family planning.
- ▶ Birth spacing was much better in Cusco than in Piura. In Cusco only a third to three-eighths had births less than two years apart, while half of the Kusiayllu mothers and 65 percent of the PANFAR mothers from Piura had a space interval of less than two years.
- ▶ Prenatal care among those interviewed generally was inadequate.
- ▶ Although dissatisfaction was expressed by many of the promoters about a lack of remuneration for their efforts, they seemed generally pleased with having been selected and with the training they had received. They were pleased to be of service to their community.

With regard to sustainability of the programs, presumably the Kusiayllu program would not be expected to continue indefinitely. It was started as a pilot project and is essentially not a Ministry of Health activity even though it gets support from the Ministry. The training of community promoters to support the program, however, is something that would be worth emulating as a part of the PANFAR program if it is continued over a longer term.

The PANFAR program is designed to prevent malnutrition by targeting at-risk families. Although it does not appear to have been fully accepted by the Ministry of Health as an MOH activity, the concept of the program seems worthy of adoption if the Ministry is going to be serious about disease prevention and health promotion. Before formally adopting the program, the Ministry would need to work with PRISMA to eliminate the duplicate reporting system and train additional personnel in the use of the automated data, growth monitoring, logistics of handling donated food, etc. It might also wish to consider such things as whether it wished to be responsible for food distribution, whether some of the criteria for beneficiary selection might be modified, and how it might obtain more community involvement.

#### E. CONCLUSIONS

1. The PANFAR and Kusiayllu programs designed and initiated by PRISMA have made a very significant contribution to the well-being of the most vulnerable segment of society (children under six and pregnant and lactating mothers) during an extremely difficult period. PRISMA is to be commended for its efforts to expand and strengthen program activities in spite of political interference early in the evaluation period and the less than full support of the Ministry throughout most of the period.
2. The PANFAR program concept is very appropriate for Peru, given its history of food insecurity. It is worthy of institutionalization, but it is not clear that the institutionalization should take place totally within the Ministry or in a partnership with one or more NGOs. In either case, the Ministry will need to accept it as a regular MOH-supported program and provide additional resources to it. There will need to be some changes in implementation processes.

3. Based on the findings of the evaluation team, the field implementation of the PANFAR program needs to be improved — at least in some sites. Some elements that appear to need attention are:
  - ▶ The degree of institutionalization of the PANFAR program within the MOH — it needs to be strengthened;
  - ▶ Improvements in the storage in, and delivery to, the more rural health facilities of donated foods;
  - ▶ Reduction of the paperwork activity of the MOH supervisors of the program, particularly that which duplicates Ministry requirements;
  - ▶ The use by the field offices of the criteria for program participation (discussed below);
  - ▶ The level of the ration to be provided, given that:
    - (a) the Kusiayllu ration is twice as large as the PANFAR ration, and this creates ill will in communities where both types of programs are located; and
    - (b) there appears to be a general practice of using the ration to serve more than just the intended beneficiaries — which was the rationale used for increasing the Kusiayllu ration; and
  - ▶ ways to use the food assistance as an incentive to graduate from the PANFAR and Kusiayllu programs and preclude the practice of some mothers of not feeding the child for a day or two in hopes that it would qualify (or remain qualified) for one of the programs.
4. There is a need to review how the PANFAR beneficiary selection criteria are being used and, if the evaluation team's findings are representative, why so few of the criteria are being used (mainly only the malnourishment of the child). While the evaluation team found some confusion on how to use the other criteria, it may be that the main reason for not using all of the criteria is because health centers are now holding down the beneficiaries to about 25. Hence, if they applied more criteria, it would surely increase their case load.
5. The Kusiayllu program is unlikely to be institutionalized into the MOH because: (a) there is no provision in the PRISMA-MOH agreement for the Kusiayllu program; (b) the Ministry involvement in the management of the program is minimal; (c) it would be costly for the Ministry to absorb both the PANFAR and Kusiayllu programs; and d) the difference between the two programs appears not to be fully understood in the field. Some recent writings (see next section) suggest that such an institutionalization would not be advisable, even if the Ministry were tempted to try.
6. Given conclusions 2 and 5, and the expected phase-out of food aid within four years, the evaluation team concludes that it would be best for PRISMA to discontinue the expansion of the Kusiayllu program and concentrate on working with the Ministry to make the PANFAR program more effective — this probably would mean an expansion of the program in some areas. Concurrently, PRISMA could be laying plans to incorporate some of the Kusiayllu activities and/or beneficiaries into the PANFAR program. It might be that the Ministry and PRISMA could agree on the incorporation of the promoter aspect of the Kusiayllu program into the PANFAR program, with PRISMA being given responsibility for managing the promoter/home outreach of the revised PANFAR program.
7. There is an over-emphasis on infant measurement at the field level to the detriment of the dissemination of nutrition and health education messages. A number of recent articles in the literature suggest that this is a common problem. Findings presented in recent literature also discuss the inappropriateness of anthropometric indicators for beneficiary selection (especially height measurements) within general health systems. The evaluation team found antipathy of mothers to the emphasis on continuous measurement of their children.

The evaluation team concludes that these problems could be overcome if the Ministry and PRISMA were to agree to an expanded and more effective PANFAR program using the other selection criteria included in its design (or possibly a modified list adding such things as access to potable water, history of infant deaths, endemic illnesses, etc.). Then measurement could be restricted to periodic weighing to reassure mothers about the progress of their children.

8. PRISMA, along with the other agencies implementing Title II MCH programs, need to review and agree upon simple nutrition and health education messages that focus on what action is desired from program participants (i.e., continue breast-feeding during episodes of diarrhea, etc.). This conclusion is based on an analysis of responses of mothers in the field as well as a review of the materials being utilized.
9. Training programs could be made more effective, meeting the programming needs of both PANFAR and Kusiayllu and providing a standardized approach. Some factors to consider include:
  - ▶ Simplifying and organizing training materials by eliminating technical terminology (EDA, IRA), reducing technical information, improving format (include illustrations, information bullets), etc. Training materials should permit versatility and flexibility for meeting the needs of the target audience.
  - ▶ Organizing training sessions around the needs of the participants (i.e., promoter sessions should be short in duration (1 hour) and focus on only two or three principal themes).
  - ▶ Programming themes based on identified community needs and in coordination with MOH personnel working with the community.
  - ▶ Developing training manuals, modules (by subject), or other appropriate mechanisms that are user friendly and would require limited preparation time. The idea is to prepare a simple package that would require less training opportunities and would be easy and desirable to use by over-worked MOH personnel. It would also facilitate reaching isolated centers.

For example, a manual and/or module on prevention of diarrhea could provide a lesson plan (outlining one goal, and no more than four simple messages), activity and game ideas for use with different groups under different circumstances, education materials (a poster and/or flip chart), ORS packets, etc.

  - ▶ Including in recipes foods appropriate for MCH beneficiaries (pregnant and lactating women and young children). Recipes should be for the use of both locally available and donated food.
  - ▶ Using participatory teaching methodologies as opposed to traditional models.
10. PRISMA field supervisors should be encouraged to look upon supervision and monitoring activities as opportunities to build self-esteem, problem solve, motivate, and inject creativity into programs.

## VI. GENERAL ISSUES/ISSUES FOR THE FUTURE

### A. NUTRITION AND HEALTH

Nutrition is extremely important to health. Recent studies indicate that nutrition is extremely important to learning and that this applies not only to pre-school child development but also to children in school, including high school (*Policy Implications of New Scientific Knowledge* by J. Larry Brown and Laura P. Sherman, The Relationship between Undernutrition and Behavioral Development in Children, American Institute of Nutrition, December 1993). While this may be self-evident to nutritionists, it is not to medical personnel trained to cure disease and

not necessarily to all public health (disease prevention) trained personnel who may focus on aspects of disease prevention other than nutrition.

Conversely, some nutrition-oriented personnel seem not to appreciate the interaction of health and nutrition. The impact of diarrhea on nutrition is generally acknowledged, but the mention of family planning in the draft report was felt out of place by some. Yet, a low birth weight baby is acknowledged to be the most vulnerable to malnutrition and disease, and a mother who has a child within less than two years of the previous child is more likely to have an under-weight baby. Continued nursing may help reduce the chances of a new pregnancy, but the use of an acceptable family planning practice could strengthen the chances of avoiding a premature pregnancy.

Any illness can impact on the amount, and quite likely the type, of food needed. Thus, childhood disease prevention is essential to achieving optimum nutrition. And good nutrition, by itself, cannot prevent diseases. Vaccination, potable water, appropriate household hygienic practices, and early detection of disease symptoms are also essential. The messages about nutrition, vaccination, water, hygiene and childhood disease prevention and recognition should all be part of "health" and "nutrition" programs. They should be presented in an interactive and re-enforcing manner.

This suggests that health and nutrition personnel in USAID and the Ministry of Health should be consciously working together trying to resolve some of the issues that will be discussed below and designing training programs for health and nutrition personnel that stress the importance of integrating nutrition, health promotion and disease prevention.

## **B. COMMUNITY-BASED VERSUS INSTITUTIONAL APPROACH**

Some of the literature suggests that the community-based approach to supplemental feeding and nutrition education is the most effective, while others suggest that the institutional approach is more sustainable. This is an issue that clearly needs to be reviewed in Peru, and the data available does not seem adequate to make the appropriate decisions.

The limited data collected by the evaluation team suggests that the different approaches utilized in the Title II program (which includes examples of each type) are having about the same results in terms of the increases in weights. These were generally small samples, however, and there was no time for designing research activities that could try to isolate other factors that contribute to the results. For example, within each type there were some variations in results, some of which might be explained by historical or local cultural factors. Furthermore, the PANFAR program, an institutional approach, has not been totally accepted by the MOH — i.e., it is not really institutionalized. The evaluation team has also suggested some actions that it felt could strengthen both types of programs; if implemented, this should change the results of the programs, but it is not clear that it would impact more on one approach than the other.

Presumably the Peruvian Government should also be trying to determine how important the availability of food is to the different approaches, and considering whether the Government has the means to distribute food if that is deemed necessary to the success of the nutrition and health education interventions (the crucial element for the long run).

For the long run, it would appear that the most desirable would be for the Ministry of Health to adopt a PANFAR-like approach, but incorporate into it a greater inter-action with the community. This is being done in other countries, usually under the name of Primary Health Care (PHC). If the Ministry is planning to move in the PHC direction, this would be an excellent time to ensure that nutrition and nutrition education are incorporated into the PHC program. In fact, given the recent history of food deficiency and the stress on discovering and dealing with malnutrition, nutrition could be the basis for entry by MOH into the community.

Some research from other countries that points up the importance of community involvement might be relevant in Peru. In both Sri Lanka and Malawi, possibly others, it was found that 80 to 90 percent of infant and child

illnesses were located in only about 10 percent of the families in a community. Furthermore, the problems causing the illnesses could not be dealt with solely through health and nutrition interventions. However, the complementary actions often could be accomplished within the community once the situation was brought to the attention of the community's leaders.

### C. PROGRAM TARGETING AND THE NEED FOR MORE RESEARCH

See the discussion in the Overview report. While the targeting applies in general, it is especially important to the MCH programs. The need for more research applies particularly to the MCH programs.

## VII. GENERAL CONCLUSIONS

1. All of the agencies are to be commended for their dedicated efforts to get food and nutritional and health messages to the most vulnerable members of society, children and pregnant and lactating mothers. PRISMA and CARITAS are especially cited because of their much larger programs and their efforts throughout the country, including in insecure areas. PRISMA has had a unique situation (among the four) that has been particularly onerous to deal with at times: working through the Ministry of Health. All agencies have gained invaluable experience in working with local communities, helping distribute health and nutrition messages, cooperating with government authorities at various levels, serving as the forerunners for a primary health care system.
2. During the crisis years, the priority had to be in getting food where it was needed. As we move into a period of diminishing Title II food resources for distribution, the nutritional and health messages need to be given a much higher priority. Similarly, the training of the local promoters (in the community) and the Ministry of Health personnel becomes especially important as the issue of sustainability comes to the fore. For that reason, the suggestions of the evaluation team for program improvement for the individual agencies have focused on the content of the nutritional and health messages and how they can be delivered more effectively.
3. The current targeting guidelines need to be reviewed — see the discussion in the Overview report.
4. Another issue of concern is the level and type of growth monitoring activity in the field. In general, research indicates and cautions that in using growth monitoring the focus of interventions becomes the process of weighing children and accurately plotting information on growth charts. In essence focus is taken away from nutrition and health education interventions. This is what was found in the field in the programs evaluated; they lacked adequate human resources to properly manage, supervise, monitor and implement programs. Also of concern was the amount of measuring of the height/length of the babies.

Studies reviewed by the evaluation team refer to weight for age as being complex for community workers to manage. Measuring height is even more difficult and has been called "rarely practical - during the first two years of life - in primary health care settings within less technically developed countries."

Fortunately, the team was informed by USAID/W personnel that USAID's policy on growth monitoring is being changed to reflect the accumulated research findings; it is planned to restrict regular growth monitoring to weight for age; height would be measured at birth and at infrequent intervals (e.g., age 3, age 5), primarily for purposes of research.

5. In general, information systems were found to be complicated and cumbersome, particularly when viewed by the personnel in the field who are supposed to feed the data into the systems. From the perspective of providing data at the individual level for all the children under their project, CARITAS has the best system — even though it needs strengthening at the local level. The evaluation team is concerned that the

imposition by USAID of additional information requirements on the agencies will complicate matters even more.

6. All four agencies have spent time, effort and money on the development of nutrition and health education materials and training. Although the agencies have coordinated with the MOH in an effort to follow norms of child survival programs (EDA, IRA, immunizations, etc.), little coordination has taken place between agencies with regards to these matters. Thus, the messages are not always consistent.

In the area of nutrition, seven different categories of foods are being used by the agencies when teaching basic nutrition. Messages are not always behavior-focused, and many times program participants have been left with special and scientific terminology, instead of behavior-oriented messages.

7. Additional coordination is needed among the agencies and with USAID, especially with regards to time, efforts and money used in technical areas of the program — from the development of nutrition and health education strategies, to training methodologies and materials, to the implementation of information systems and commodity management. Organized opportunities by which sharing and coordination could be accomplished might save time, money and efforts.

## VIII. RECOMMENDATIONS

1. **USAID/Peru should coordinate an effort (workshop or other mechanism) with the MOH and agencies implementing Title II Programs to review, revise and reach consensus on nutrition and health education messages for improved program impact.**

Content of training programs and methodologies should also be reviewed. Social marketing, communications and educational strategies for enhancing awareness and motivation should be considered.

2. **USAID/W should review targeting guidelines that it may have established for Peru, taking into account the discussion in Section VI above, and/or recommend to USAID/Peru that it review with the agencies and the MOH the targeting policy for the Title II program, taking into account the Section VI issues.**
3. **USAID/Peru should confirm with USAID/W that new guidelines on growth monitoring will be forthcoming soon. If they are not expected soon, USAID/Peru should coordinate an effort to address the appropriate anthropometric measures to be used in the Title II Program in Peru.**

Such a roundtable or "convocatorio" should bring together the agencies, other interested NGOs, the MOH, INAN, local universities, international agencies and technical assistants to facilitate the development of protocols, standards and/or guidelines for use in Peru.

4. **USAID/Peru should improve the coordination between the Food for Development office and the Health, Population, and Nutrition office, especially in responding to the recommendations above.**

In addition, HPN may be able to help facilitate improved relations between the agencies and the MOH (especially PRISMA) and improve the technical soundness of programs in areas of nutrition, family planning and child survival themes (EDA, IRA, immunizations, etc.). HPN has successfully utilized the social marketing approach in their work with some 13 cooperating sponsors working in the area of family planning.

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**ATTACHMENT 1  
RESULTS OF THE STATE OF CHILD HEALTH**

	TOTAL AGENCY FILES	TOTAL LOCAL FILES	n Files	WEIGHT GAIN/LOSS IN CHILDREN					VACCINATIONS			
				# Weighings	Gain	Loss	% of children gained weight	children	Complete	Incomplete	N/I	% Vacc. Complete
<b>CARE</b>	<b>47</b>											
<b>1) Piura</b>		<b>18</b>		<b>212</b>	<b>170</b>	<b>42</b>	<b>80.2</b>					
Pedregal			6					122	91	7	24	74.6
La Toma			2					27	24	0	3	88.9
Pueblo Nuevo			10					133	109	8	16	81.9
<b>2) Puno</b>		<b>29</b>										
Challacollo			10	83	79	4	95.2	40	32	3	5	80
Amaparani			10	71	57	14	80.3	71	34	30	7	47.9
Anccacca			9	70	65	5	92.9	70	27	25	18	38.6
<b>PRISMA</b>	<b>133</b>											
<b>a) Panafar</b>												
<b>1) Piura</b>		<b>30</b>										
Chulucanas			30	146	115	31	78.8	30	25	5	0	83.3
<b>2) Cuzco</b>		<b>30</b>										
Oropesa			30	116	114	2	98.3	61	51	10	0	83.6
<b>b) Kuslayllu</b>												
<b>1) Piura</b>		<b>44</b>										
Chulucanas			22	192	158	34	82.8	35	26	9	0	74.2
Curamori			22	114	93	21	81.6	25	25	0	0	100
<b>2) Cuzco</b>		<b>29</b>										
Zarzuela			29	256	206	50	80.4	51	26	25	1	50.9
<b>ADRA/OFASA</b>	<b>120</b>											
<b>1) Chiclayo</b>		<b>60</b>										
Chilapito			30	114	96	18	84.2					
Maria Parado de Bellido			30	150	109	41	72.7					
<b>2) Cuzco</b>		<b>60</b>										
Tierra Prometida (93-94)			15	161	141	20	87.6	134	125	9	0	93.3
Tierra Prometida (94-95)			15	156	145	11	92.9					
Construccion Civil (93-94)			15	171	151	20	88.3	147	132	15	0	89.8
Construccion Civil (94-95)			15	117	96	21	82.1					
<b>CARITAS</b>												
<b>1) Piura</b>	<b>10,353</b>											
Chulucanas (Distrito)		<b>10,211</b>	10,211	10,211	7,350	2,861	71.9					
<b>2) Puno</b>												
Challaputi		<b>142</b>	45	208	185	23	93.3					
Mullachico 94-95			97	219	202	17	93.3					

Atch1.WB1

Note: N/I: no information.

Source: Instituto de Investigacion Nutricional p. 146

Salud del Nino: Manual field records of the agency in the respective communities

Caritas: Computerized records compiled in the field Instituto de Investigacion Nutricional / PL480 90-95

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**ATTACHMENT 2**  
**ATTITUDES OF MOTHERS IN RELATION TO CHILD HEALTH TOPICS**

AGENCY	CARE		CARITAS		ADRA		PRISMA				TOTAL
LOCALE	PI	PU	PI	PU	CH	CU	PF		K		
TOPIC							PI	CU	PI	CU	
<b>BREASTFEEDING</b>											
- Initiate BF before 24 Hrs	nd	6	nd	7	5	4	1	5	1	8	37
- Offer liquids before 6 months	nd	7	nd	7	10	9	10	9	8	8	68
- Use bottles	nd	9	nd	8	5	6	10	5	9	6	58
<b>COMPLEMENTARY FEEDING</b>											
When the child is fed:											
- Soup is offered first	nd	10	nd	10	10	9	10	9	9	4	71
- Oil is added to the food	nd	7	nd	7	1	8	3	3	4	10	43
- Mean age of introduction of broths/soups (M)	nd	5	nd	6	4	5	5	5	5	6	41
- Mean age of introduction of paps (m)	nd	7	nd	7	5	6	6	6	6	6	49
<b>GROWTH MONITORING</b>											
- Control child's weight	nd	7	nd	9	2	5	6	8	5	10	52
- Know the meaning of the colors on the chart	nd	5	nd	2	6	4	2	2	1	6	28
<b>DIARRHEAL DISEASE</b>											
When the child has diarrhea:											
- Seek attention at: Establishment	nd	2	nd	3	7	8	6	10	2	10	48
- Promoter	nd	0	nd	1	1	0	0	0	0	0	2
- Use medicines	nd	1	nd	2	5	7	8	8	6	9	46
- Suspend breastmilk during diarrhea	nd	3	nd	2	0	0	2	0	2	1	10
- Use ORS during diarrhea	nd	0	nd	3	2	4	5	7	4	9	34
- prepared appropriately	nd	0	nd	1	2	3	5	6	4	9	30
- Use home-based ORT during diarrhea	nd	9	nd	4	8	5	2	1	1	0	30
- prepared adequately	nd	4	nd	2	5	2	0	1	1	0	15
<b>RESPIRATORY INFECTIONS</b>											
- Child with cough, fever, stuffy nose, cold	nd	7	nd	5	3	3	2	6	1	5	32
- Use medicines	nd	4	nd	2	9	9	9	9	9	9	60
<b>VACCINATIONS</b>											
- Children with complete vaccines	nd	6	nd	7	10	7	9	10	10	9	68

**Note: In each locale 10 mothers with children under 5 years of age were interviewed**

nd = no data available

PF = PANFAR K = Kusiayllu

PI = Piura    PU = Puno    CH = Chiclayo    CU = Cusco



**ATTACHMENT 3**  
**ATTITUDES OF MOTHERS IN RELATION TO MATERNAL HEALTH TOPICS**

AGENCY	CARE		CAR	ITAS	AD	RA	PRIS MA				TOTAL
LOCALE	PI	PU	PI	PU	CH	CU	PF		K		
TOPIC							PI	CU	PI	CU	
Age of interviewed mothers (years)	nd	29	nd	31	34	28	29	29	31	30	
Age range	nd	(21-44)	nd	(20-40)	(24-42)	(23-35)	(23-40)	(20-42)	(20-44)	(23-42)	
<b>GESTATIONAL HISTORY</b>											
Mean # of pregnancies (1)	nd	4.2	nd	4.9	4.8	3.2	4.5	4.8	5.3	4.6	104
Intergenerational space < 24m	nd	10	nd	9	14	3	22	13	21	12	
Total intergenerational space	nd	32	nd	26	37	22	34	39	43	32	265
No. of children who died	nd	4	nd	12	4	1	8	11	8	3	51
No. of miscarriages/abortions	nd	0	nd	0	4	0	1	0	1	1	7
Total No. of children for all mothers	nd	42	nd	49	44	32	44	48	52	45	356
Average age at 1st pregnancy	nd	19.8	nd	21.2	19.8	19	18.5	19.9	19.3	20.2	
Age range for 1st pregnancy	nd	(14-28)	nd	(16-31)	(17-25)	(15-23)	(11-24)	(15-32)	(15-24)	(15-24)	
<b>CONTROL OF LAST PREGNANCY</b>											
No. of mothers with prenatal control											57
Month of firs prenatal visit	nd	5	nd	3	9	8	7	9	7	9	
No. of controls: + 3 times	nd	5	nd	5	4	3	3	4	5	3	32
Mothers vaccinated against tetanus	nd	1	nd	0	5	4	3	6	2	5	26
	nd	8	nd	9	10	9	9	10	6	10	71
<b>ATTENDANCE AT LAST BIRTH</b>											
Place of birth of the child											28
Institutional	nd	1	nd	0	5	4	6	4	3	5	
Who attended the birth											36
Health personnel	nd	1	nd	1	8	5	7	4	4	6	
Midwife	nd	4	nd	1	2	3	3	4	6	3	26
Relative	nd	5	nd	8	0	2	0	2	0	1	18
<b>FAMILY PLANNING</b>											
Use some method	nd	5	nd	6	5	6	9	7	4	8	50

Note: In each locale, 10 mothers with children less than 5 years of age were interviewed.

(1) Includes abortions

CH = Chiclayo

CU = Cusco

HE = Health Establishments

K = Kusiayllu

PF = PANFAR

PI = Plura

PU = Puno

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**ANNEX C**

**COMEDOR PROGRAMS**

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## I. INTRODUCTION

### A. OVERVIEW OF THE COMEDOR ELEMENT OF THE TITLE II PROGRAM

Throughout this annex the Spanish word, "*comedor*" (plural *comedores*), will be used instead of an English translation because the latter implies a totally different type of institution. For example, community kitchen, the usual translation, is likely to be interpreted as a soup kitchen which is set up by a church in its own premises to feed the homeless. Since *comedor* is literally "kitchen" in English, it is also used in some reports to refer to the institutional feeding of children or others. Neither usage is appropriate for the *comedor* element of the Title II program.

The *comedor* reviewed in this evaluation is both a kitchen for cooking meals for the families of the members of the *comedor* and an institution of solidarity and mutual support established by a group of women in a small geographic area to deal with poverty. As for the kitchen part, the women get together to prepare collectively one solid meal (usually daily) for their families and other individuals (e.g., indigent members of the community).

The first *comedores* were established in the late 1970s, growing out of mothers' clubs that had previously been established, usually by the local diocese of the Catholic church, to further the self-esteem and capabilities of the women. Although the *comedores* were originally established by the women to deal with their own problems, governments, political parties and nongovernmental organizations (NGOs) — both social and developmental — have come forward to support the *comedores*.

As discussed in the overview report of this evaluation, extreme poverty has occurred in Peru since about 1988 due to political instability, disastrous economic policies followed by a rectifying shock treatment in 1990, terrorism, and drought. The *comedores* provided a most effective means for mitigating this poverty in the urban slums of the country. They were organized, many had been through previous crises, and their members also contributed funds and/or labor (which reduced costs). As the crisis expanded, new *comedores* were quickly established because of the existing models and the existence of the mothers' clubs, out of which many were formed.

The number of *comedores* expanded from a handful at the end of the 1970s to around 300 in Lima in 1983 to 1,800 by 1988, 3,000 by the end of 1989. Terrorist violence in the city caused some closures between 1991 and 1993 when some 11 members of *comedores* were killed and some left the area. A 1995 estimate placed the number of *comedores* at more than 5,000 in Lima. In addition, there are a considerable number of *comedores* in departmental capitals and other towns to which large numbers have migrated due to the violence and the recurring droughts in some parts of the country from 1988 to 1993.

Because of the vagaries of politics, the support of political parties and governments have often been of a boom or bust nature. For example, some of the *comedores* visited by the evaluation team report generous support prior to the last election by the government food distribution organization in contrast to the minimal amounts, if any, which are now distributed.

A discussion of the Title II—supported programs carried out by CARITAS and CARE are discussed in Sections II and III below.

### B. METHODOLOGY OF THE EVALUATION

After a review of important documentation, and determining the current status of the *comedores* being assisted with Title II food (i.e., some continuing, some no longer receiving food), the *comedor* evaluation team prepared a list of the impacts for which it would be looking. For those *comedores* no longer receiving Title II food, the team would look for answers to the following questions:

- ▶ How many comedores are still functioning?
- ▶ What has happened to the quantity and quality of food being served?
- ▶ Has the comedor continued to serve indigents?
- ▶ Is the comedor still facilitating the provision of social services (e.g., health) to its members?

Other questions to be addressed in the evaluation included:

- Have some of the comedores adopted strategies to become self-sufficient?
- Have women who have managed comedores assumed additional commitments and responsibilities in the community?
- ▶ Have women who participated in the program seen a positive change in relations with their spouses or children due to their work with the comedor?
- ▶ Have women who participated in the comedor increased family income, either from receipt of rations for work in the comedor or from other work carried out in the free time made available as a result of their participation in the comedor?

Next, the team elaborated questionnaires or check lists for use in interviews and focus group discussions. The interviews and discussions were held with the directors of comedores (those still in the Title II program and those no longer included), women that cook in the comedores, beneficiaries of the comedor (in and out of the program), program administrators at the central and local level, technical personnel of the agencies, health personnel, NGO representatives and local authorities.

The team then selected sites to visit. Most of these were in Lima, but the team also visited comedores in Chimbote. Taking into account the places included in previous evaluations, the team opted for sites in the east and north zones (cono) of Lima. The team met with 35 focus groups and carried out 17 interviews with key informers. These groups are classified by geographic location, along with additional methodological information in Volume III.

Discussions of the CARITAS and CARE programs are set forth in Sections II and III below. Because the organization and content of CARITAS's programs in Lima and Chimbote are quite different, they are discussed separately in Section II. The pattern of CARE's programs are pretty much standardized, so preparing different sub-sections for Lima and Chimbote was not felt necessary.

## II. CARITAS COMEDOR PROGRAMS

### A. GENERAL

Although CARITAS has been a major contributor to comedores, the assistance has been a part of the program "Other Children" and has had no objectives established for it. Furthermore, CARITAS implements all of its programs through dioceses (41 nationally). It is at the level of the diocese that objectives are established. The result, as will be seen below, is that the content of the programs may vary considerably between dioceses. Furthermore, it is at the diocese that implementation progress is maintained; no data are available from CARITAS headquarters on the achievements nationally of the program.

By using the Annual Estimates of Requirements (AERs) and making some adjustments in some years, the evaluation team has compiled the following data on the number of beneficiaries nation-wide that were expected

to benefit annually from the CARITAS—supported comedores (in thousands of beneficiaries):

1990	162
1991	206
1992	267
1993	259
1994	225
1995	158

For the years 1993 to 1995, CARITAS headquarters has provided information on the amount of food distributed and the number of beneficiaries by diocese. While the totals for the food distribution are close to the AER data, the beneficiary data are considerably larger than the AER estimates. This reflects the policy of the dioceses to distribute whatever food is available to all those who are in need, rather than give a full ration to a reduced number of beneficiaries who have been classified as the most needy. The data by diocese, which have been grouped by coastal, *sierra* (high mountainous areas), and *selva* (jungle/rain forest), are shown in Table C-1 below.

TABLE C-1

## Comedor Beneficiaries by Region

REGIONS	1993	1994	1995
COAST			
Beneficiaries (000s)	252	193	134
Percent of Total	74%	69%	64%
SIERRA			
Beneficiaries (000s)	77	77	64
Percent of Total	23%	27%	31%
SELVA			
Beneficiaries (000s)	9	11	10
Percent of Total	3%	4%	5%
TOTALS	338	281	209

SOURCE: Derived from CARITAS Report on Programs by Diocese; comedor beneficiaries estimated at 85% of total "Other Niños."

## B. CARITAS/LIMA

## 1. Program Implementation

Support to comedores by CARITAS/Lima dates from 1979, but the format of the current program dates from 1986 when a program of training for comedor members was initiated. This training included organization and administration, nutrition, and integration of the women in the comedores and the comedores in the community environment. In 1987, CARITAS signed an agreement with the UN Children's Fund (UNICEF) to execute a child survival program to reduce infant malnutrition through training of some 28,000 mothers through 600 comedores. In 1988, runaway inflation caused a further exacerbation of the plight of the poor and a large number of new comedores were established. The economic "shock" following the measures taken by the Fujimori government to control inflation resulted in an explosive increase in new comedores.

During the period 1990-1992, CARITAS/Lima participated in the Emergency Social Program (Programa Social de Emergencia — PSE). The magnitude of the feeding program precluded the implementation of any significant

training program. By 1992 run-away inflation was under control, the demand for donated foods had subsided somewhat (many ollas communes had closed), and the PSE had been de-activated. CARITAS/Lima reviewed the situation and concluded that it needed to revise its comedor program to: (a) promote income-generating activities; and (b) re-institute its training program. The training program moved away from health subjects to avoid duplication with the Ministry of Health (Ministerio de Salud — MINSA). The new emphasis was placed on comedor administration and organization, hygiene and nutrition.

Thus, in 1993, CARITAS/Lima prepared a training manual to cover the new themes and established a revolving loan fund to assist comedores to buy needed equipment or construct permanent structures for the comedor. Training has been carried out, but few comedores have requested loans. The government distributed some 5,000 cooking stoves to comedores in 1995.

The objectives of the comedor program in Lima generally have been presented in general terms. Only in 1993 was there some specificity and objectively verifiable targets: (a) improved administration targets for the 1800 comedores supported; and (b) 80 comedor members would be earning an income higher than the national average. No information is available on attainment of targets, except that a 1995 report indicates that there were 166 loan applications reviewed in that year. It appears that there may have been 42 loans in effect and there was an achievement of 58 percent of the target that "75 percent of beneficiaries with access to a loan would have accumulated 20 percent more than its initial capitalization."

In 1994 the objective was simply that beneficiaries would obtain the capacity to improve their situation. In 1995 objectives were changed again: 50 percent of the comedores supported would provide good quality food service in 1995. The indicators were: (a) 70 comedores with access to loans would improve their hygienic conditions; (b) 70 percent of the comedores would have a better organizational structure; and (c) 50 percent would have better administration and financial management. There are no assessments of the degree to which the targets were achieved.

Eight criteria have been established for selecting comedores to be supported and 11 criteria have been adopted for use in deciding which comedores will no longer receive donated food (see Volume III). In actual practice, one local comedor association refused to accept any food because it was unwilling to cut off some members and not others. In addition, the evaluation team found instances of the local organization distributing the food to all member comedores even though some had been targeted to lose the donation.

The quantities of food distributed by beneficiary by CARITAS/Lima and the number of beneficiaries served are shown in Table C-2 below. These figures include comedores plus a number of smaller groups. For the years 1992 - 1995, the comedor share of the number of beneficiaries is, respectively, 56 percent, 60 percent, 42 percent, and 52 percent.

The extremely large figures in 1990 and 1991 could include data from other food sources. CARITAS/Lima says, however, that the figures simply reflect the extremely severe situation and the diocese policy of distributing the food to as many of the needy members of the diocese as possible rather than giving an established ration to the neediest.

TABLE C-2

## Distribution of Food by Caritas/Lima, 1990 - 1995

YEARS	BENEFICIARIES (in 000s)	WHEAT FLOUR (kg. per benefic.)	BULGUR (kg. per benefic.)	CORN- SOY BLEND (kg. per benefic.)	COOKING OIL (liter/ benefic.)
1990	2,096	1.4	0.3	0.4	0.1
1991	2,069	3.5	0.9	0.9	0.3
1992	426	17.0	5.2	4.8	2.7
1993	385	16.5	4.3	4.8	2.1
1994	180	27.6	7.1	8.1	4.2
1995	117	33.0	11.6	8.6	4.5
TOT/AVER	5,273	16.5	4.9	4.6	2.3

SOURCE: CARITAS/Lima

The data in the foregoing table illustrate the tremendous problems in the early 1990s and the inadequacy of the rations available. Even with the greatly reduced number of beneficiaries in 1995, the average ration is still less than the rate given in the AER (48 kilograms of wheat flour, 12 kilograms of bulgur, 12 kilograms of CSB, 6 liters of cooking oil). The bulgur, CSB and oil are for the noon day meal; the wheat flour is used by the comedores for baking bread for breakfasts. CSB is also used at times to make a porridge for the children.

It should be noted that CARITAS/Lima also distributes food to comedores as part of project PER 4512 supported by the World Food Program. More complete rations are provided under that program.

## 2. Program Monitoring and Support

A special five-person monitoring group was established in CARITAS/Lima in 1993. In 1995 supervision and monitoring forms were designed for use with each visit to a comedor. It appears that this was a requirement of PER 4512.

A group of social workers, with the title of Advisors, have the responsibility to provide technical support to the comedores. A list of tasks was spelled out in a 1992 document (see Volume III). Training takes place in a comedor, with 10 comedores participating. No data have been accumulated on the work of the advisors for most years. In 1995, however, it is reported that the 20 advisors gave one training session in food, nutrition and hygiene, 27 in aspects of organization and 59 in administration and accounting. In addition, there were 118 consulting visits treating with organizational themes and 77 relating to the handling of the accounting records.

Volume III includes information on CARITAS/Lima's training methodology and training materials. While the team found no documents setting forth the achievements and/or limitations of the training programs, the interviews with advisors and supervisors suggested some problems: (a) inadequate materials, making it difficult for comedores to replicate the sessions with their members; (b) inadequate emphasis on the proper role of the comedor manager — some have made themselves "indispensable"; and (c) the low level of literacy among the participants.



In early 1996, due to the cutbacks in food made available for distribution to the comedores and budget cuts, the number of advisors was cut by 50 percent. Thus, training will now have an even lower priority.

### *3. Program Planning, Supervision, Administration*

The absence of a specific program for comedores and the inclusion of comedor support with a number of other activities has made it more difficult for the technical team to carry out program supervision in a sustained and coherent way. Similarly, the structure has not been conducive to good planning. Even so, it is not clear why the objectives were changed so frequently.

There has been no evaluation of the impact of the activities carried out. The so-called annual evaluations really focus on process issues. There is no information describing the beneficiary population. An inventory of the comedores being supported has been taken, but the data have not yet been compiled. There are no studies of the nutritional impact of the foods provided or of the adequacy of the rations served by the comedores.

#### **C. CARITAS/CHIMBOTE**

Chimbote, in Ancash department, is the principal industrial and commercial center of the Chavin region. Between 1990 and 1995, employment in Chimbote has been negatively impacted by structural reforms (e.g., privatization) and by technological changes in the fish processing industry. That industry has recuperated during the last two years, and Chimbote is again the most active fishing port in the world. Nevertheless, the city lost some 3,500 jobs between 1992 and 1995 as the number of fish processing firms has declined from 85 to 45. In-migration, reflecting droughts and terrorist activity in rural areas, swelled the ranks of the impoverished. Chimbote's unemployment rate of 14 percent is the second highest in the country (after Arequipa).

In 1978 there were 32 comedores, but this number had dropped to 4 by 1983. As a result of the "El Niño" disasters in that year, some 51 new comedores sprang up. This number fell again as the situation improved, only to be followed by another crisis in 1988 from drought. This was followed in 1990 by the economic "shock" and by the cholera epidemic in 1991. Following the economic shock, some 150 "ollas comunes" arose in three months. The olla comun differs from the comedor in that the ollas are more temporary; the women bring whatever food they have to a common point and collectively prepare a communal meal.

Before the crises of the late 1980s and the beginning of the 1990s, CARITAS/Chimbote had used food aid primarily for food for work activities in the nearby rural areas. Its support to Mothers' Clubs and comedores had been primarily in the form of education programs and some food support for income-generating activities initiated by the Mothers' Clubs. The training activities were put on the back burner in 1990 as food distribution became widespread and urgent, particularly in the peri-urban slum areas that were increasing in number and size. The largest amount of food was distributed in 1991.

CARITAS/Chimbote began coordination with the Ministry of Health in 1988. The Ministry trained CARITAS promoters who promoted health activities through the comedores. This activity has dropped off with the decline in food distribution. As the amount of food available for distribution dropped, CARITAS/Chimbote decided to terminate assistance to the urban comedores and to support increased activity in the rural and semi-rural areas of the diocese. Details on the various elements of the Chimbote program are set forth in Volume III. The impact of the program on the women members of the comedores and the results of the termination of assistance to the comedores is similar to that found in CARITAS/Lima, except that the percentage of closures of comedores losing assistance is higher in Chimbote.

### III. CARE COMEDOR PROGRAMS

#### A. GENERAL DESIGN OF THE PROGRAM

CARE's experience with comedores began in 1980 as part of a basic infrastructure program in support of the residents of "pueblos jóvenes" (newly created and settled communities on the outskirts of a city or town, usually involving sub-standard housing, no utilities and no government services in the area). In 1986, under this program, CARE organized a pilot project in Lima, Trujillo, Piura and Chimbote to increase the capacity of the comedores to become self-sustaining.

This experience was followed in 1988, during the period of serious economic crisis, by the establishment of a new Integrated Development project (PRODIA). Although support to comedores is the largest component of the project, PRODIA also included the provision of food to institutions caring for vulnerable groups such as orphans, invalids and the aged. The support to comedores included food rations, training in food handling and health, and support for improving the infrastructure of the comedores. The project was also oriented to helping the women involved in the comedores to find income-generating activities.

The original PRODIA plan for the comedores, which had been to provide intensive support to targeted comedores for eight months and then let them go on their own, had to be modified in light of the severity of economic and social conditions beginning in late 1989 and continuing for the next two years. Training had to be restricted to record-keeping (e.g., inventory) and accounting as CARE mounted an additional emergency program which was carried out to the end of 1990. PRODIA resumed regular operations during 1991 and 1992 in slum areas in Lima, Trujillo, Cajamarca, Piura, Puno and Chimbote.

In 1993, PRODIA II was launched with two components: (1) Special Groups — for the poorest and most vulnerable (as in PRODIA I); and (2) Comedores. The comedores component was to prepare them for eventual operation without donations. The program, which was to operate during the fiscal years 1993 - 1997, was to include four activities (besides the provision of food): (1) gardens and communal livestock; (2) centers for nutritional recuperation; (3) day care centers; and (4) wholesale buying. The project was to be carried out in two phases:

- |          |   |
|----------|---|
| Phase I  | The current level of food aid would continue for two fiscal years.  |
| Phase II | <p>(1) Donated food would be directed, progressively, to groups in the most precarious conditions: children at nutritional risk and those so poor they cannot obtain minimum food needs; and</p> <p>(2) The volume of donated food to the comedores would be reduced during the next three years.</p> |

In 1994, CARE was told by USAID that support would not be available to continue PRODIA II through FY 1997 as planned. Rather, PRODIA II would be closed as of the end of FY 1995 and CARE was to re-focus its program to target better the "poorest of the poor." CARE was able to obtain a partial reprieve. It obtained approval to continue supporting 600 comedores (of the 2,000 being supported under PRODIA II) for two years under a new program, MIFA (Mejoramiento de Ingresos Familiares). MIFA is designed to help the comedores become self-sufficient, which was the object of PRODIA II. CARE also obtained approval for the establishment of nutritional improvement centers (the MENU program — Mejoramiento Nutricional) to target malnourished children. The latter is not related to the comedores, but it is similar to the centers for nutritional recuperation that were piloted under PRODIA II.

**B. PROGRAM IMPLEMENTATION****1. Food Support**

Table C-3 below shows the trend in the number of comedores supported by CARE between 1990 and 1995, along with the number of beneficiaries and the metric tons of food distributed. Table C-4 follows giving the trend in beneficiaries served by geographical region.

**TABLE C-3****Implementation Trends in Care's Comedor Program**

YEAR	# OF COMEDORES	# OF BENEFICIARIES	METRIC TONS OF FOOD
1990	1,618	244,456	6,673
1991	1,828	186,494	13,526
1992	2,647	238,845	18,166
1993	2,714	311,132	20,256
1994	2,190	295,854	21,206
1995	2,101	227,424	16,236
AVERAGES	2,183	250,701	16,010

SOURCE: CARE, "Informe Memoria del PRODIA", 1995. (unpublished)

**TABLE C-4****Comedor Beneficiaries by City**

YEAR	PIURA	CAJA-MARCA	TRUJILLO	CHIMBOTE	PUNO	LIMA
1990	7,820	50,146	30,460	10,140	33,655	112,235
1991	7,578	16,145	10,813	10,635	15,805	125,518
1992	13,585	22,064	13,139	14,564	9,807	165,686
1993	12,398	21,013	25,187	18,476	15,258	218,800
1994	14,589	19,104	21,760	15,323	14,987	210,091
1995	9,916	16,647	14,203	12,803	14,678	159,177
AVERAGE	10,981	24,186	19,260	13,657	17,365	165,251
% OF TOTAL	4	10	8	5	7	66

SOURCE: CARE, "Informe Memoria del PRODIA," 1995. (Unpublished)

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## 2. Gardens

CARE's experience with family gardens was begun in the "cono sur" of Lima in 1983. In PRODIA I, demonstration gardens were planted in Trujillo, Cajamarca and Comas. The program was continued during PRODIA II: 28 gardens were planted in Cajamarca and 35 in Puno. The gardens were popular with the comedores with nearly 90 percent participation in some cases. Some 40 percent of the participating comedores had increased their income by 15 percent from selling the surplus from their gardens. In addition, 70 percent of the vegetables served in the comedores were coming from the demonstration gardens. Two comedores in the Puno area, where untimely freezes are common, set up greenhouses for their gardens.

## 3. Domestic Livestock

Raising ducks was promoted in 28 comedores in the Trujillo area. It was planned that this activity would improve the diet in the comedor and also provide some surplus for the market. This activity was not particularly successful, due primarily to an excess of ducks in the local market and a drop in the prices.

## 4. Centers for Nutritional Recuperation (CRNs)

Pilot centers were established in 10 comedores in Piura and 50 comedores in the five zones of Lima. In Piura, there was minimal change in the numbers of infants in the normal range after six months's operations. The results in Lima were more positive, with the normal category rising from 41 percent to 65 percent — to 71 percent after one year. As of a May 1995 evaluation, CARE reported that none of the CRNs were continuing to operate.

## 5. Infrastructure Support

Over \$1 million was distributed to 2,445 comedores over the six-year period; the average loan was \$421. The distribution by city is shown below in Table C-5.

TABLE C-5

### Infrastructure Support to Comedores

LOCATIONS	# OF COMEDORES ASSISTED	FUNDS PROVIDED (\$ 000)	% OF TOTAL	AVERAGE AMOUNT PROVIDED
Piura	134	71.8	7	536
Cajamarca	234	69.9	7	299
Trujillo	225	97.3	9	432
Chimbote	136	69.8	7	513
Puno	254	84.1	8	331
Lima	1,462	636.5	62	435
TOTALS	2,445	1,029.4	100	421

SOURCE: CARE, Informe de Memoria de PRODIA, 1995. (unpublished)

## 6. Wholesale Buying

This activity, which was scheduled for the second phase of the project, was never implemented.

### C. PROGRAM MONITORING AND SUPPORT

CARE has had in place a defined system for monitoring involving Ministry of Health personnel as well as CARE personnel. Forms have been designed for reports on visits. Data have been maintained on the number of visits, by year, to comedores in each of the cities.

Technical assistance in health and nutrition was provided by Ministry of Health personnel, backstopped by CARE professionals. Other subjects, such as comedor management (administrative and financial), were usually covered by CARE personnel. The personnel assigned by the Ministry of Health during PRODIA I did not measure up to CARE standards. CARE was successful in obtaining Ministry agreement to provide more qualified personnel for PRODIA II training activities. In addition, CARE strengthened its own training group. A summary of the training activity during the six-year period is set forth in Table C-6 below. More details on monitoring of, and technical support to, the comedor program is included in Volume III.

**TABLE C-6**

#### Training Activities in Support of the Comedores

LOCATIONS	NO. OF COURSES IN WHICH PARTICIPATED	NO. OF COMEDORES WHICH PARTICIPATED	NO. OF COMEDOR MANAGERS TRAINED (1)	AVERAGE NO. OF COMEDORES PER COURSE	AVERAGE NO. OF MANAGERS PER COURSE
PIURA CAJAMARCA	91	610	2,400	7	26
	251	784	3,934	3	16
TRUJILLO CHIMBOTE	196	1,053	3,532	5	18
	194	1,067	4,226	5	22
PUNO LIMA	394	2,161	7,826	5	20
	937	6,282	18,804	7	20
TOTALS AVERAGES	2,063	11,957	40,722	6	20

SOURCE: CARE, "Informe Memoria del PRODIA," 1995. (unpublished)

(1) Includes managers, treasurers and members of comedor boards.

### D. PROGRAM PLANNING, SUPERVISION, ADMINISTRATION

CARE has prepared appropriate plans for the comedor program in both PRODIA I AND II. It has also carried out evaluations of the comedor activities and utilized the results of the evaluations to improve the design of follow-on activities. At USAID's insistence, it had to terminate PRODIA II two years ahead of schedule. Nevertheless, it was able to obtain approval to continue (in new projects) two activities that had been initiated in PRODIA II: (1) completing the process of strengthening some 600 comedores before terminating all assistance to them; and (2) implementing nutritional recuperation centers (albeit not in conjunction with comedors).

Supervision by CARE has permitted it to become aware of problems, e.g., in the activities of Ministry of Health personnel, and to take appropriate measures. Similarly, when distribution of food by PRONAA was not found to be satisfactory under PRODIA I, CARE obtained agreement for CARE to take over responsibility for food distribution under PRODIA II.

#### IV. CONCLUSIONS

1. The establishment of comedores is a unique way that Peruvian women have used for nearly 30 years to survive and maintain their families in times of crisis. The comedores alone, however, were grossly inadequate to deal with the multiple crises that existed from 1988 to the present. At the same time, however, they provided a most efficient and cost-effective way of distributing food to those in need in the urban slum areas. The women who are members of the comedor cook the food as well as make a small cash payment to contribute to the total cost of the meal.
2. Since the Peruvian governments during the period were unable or unwilling to provide an adequate safety net for the poor, the distribution of donated foods, such as that provided by USAID and distributed by CARITAS and CARE through the comedores, made a very significant contribution to family nutrition and well-being. If actions in other countries by people faced with a crisis like that which existed in Peru is any guide, the large-scale assistance may also have contributed to political stability during the period.
3. The decision by USAID/Washington in 1993 to reduce its support to the comedores was based, at least in part, on the assumption that the Peruvian economy was on the road to recovery so personal incomes, particularly in the urban areas, would be on the rise. Unfortunately, the progress in the economy in 1993 and 1994 began to falter in 1995 and the increases in investment have not resulted in increases in industrial production and employment. Thus, it is unfortunate that the USAID support was reduced so abruptly. Based on the following elements, the evaluation team believes that comedor support from some source may be needed for a longer period than now planned:
  - ▶ The economy is surely in better shape than it was four years ago, but it is still not anywhere near pre-crisis levels, inflation is still a problem for the poor, the adjustments necessary for recovery are still not over, and the economy is currently backsliding (see the discussion in the Overview, Section II;
  - ▶ In over 200 interviews with members of comedores or community people working with the comedor program, a constant theme was that the economic situation in the slum areas is getting worse. Furthermore, only one woman in seven had a spouse with a full-time, regular job. Almost every woman is trying to devote some time to an outside job, but the resulting income is minimal.
  - ▶ A considerable number of the comedores have closed as a result of the termination of assistance (as high as 30 percent of the CARITAS-supported comedores in Chimbote).
  - ▶ The comedores which are no longer receiving donated food, but which are trying to keep operating, have responded by trying to augment their resources and/or cut their costs. Resource augmentation measures include: (a) increase the price of meals to their members; and (b) increase or begin to accept non-members (who are charged more than members). Cost-cutting measures include: (a) reduce the amount and quality of the food being served; and (b) reduce drastically or eliminate support to hardship cases who are unable to contribute labor or funds to cover their participation in the comedor. Thirty-seven (37) of 44 comedores in Lima and all 17 contacted in Chimbote have reduced the support of hardship cases — from 440 to 200 in Lima; 173 to 54 in Chimbote.

The increase in prices and/or reduction in the quality of the meal has resulted in a significant loss of members. Many of the comedores, particularly the poorest, are not in good locations to attract the public. Given all of the foregoing, plus the fact that CARITAS/Lima did not give priority to preparing the comedores for the loss of donated food and CARE was unable to complete PRO DIA II, it is likely that a significant number of those comedores trying to continue will not be able to do so.

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- ▶ Given the closure already of some comedores, the negative impacts cited above which are taking place in the comedores no longer receiving donated food (loss of members, reduced nutritive value of the meal provided, and an increase in unattended "social cases"), and the likelihood that additional comedores will fail, the rate of malnutrition, which appears to have been relatively stable, is likely to begin to rise again. In fact, Ministry of Health personnel in Chimbote told the evaluation team that the malnutrition rate there is higher now than it was in 1992.
- 4. One of the salutary impacts of the comedor program has been the training received by the members as well as the managers (*dirigentes*). This has given the women increased self-respect and has allowed them to participate more in communal activities and organizations. In addition, membership in the comedor has helped them contribute to the family income, either by receiving rations for their work in the comedor or by freeing up time from cooking so they could participate in other income-generating activities.
- 5. Using the comedor as a base for health and nutrition education and promotion activities has been moderately successful, depending upon the quality of the Ministry of Health personnel assigned and the priority given to the activity by the sponsoring partner — highest priority by CARE, better in CARITAS/Chimbote than in CARITAS/Lima.

## V. RECOMMENDATIONS

1. That USAID foster appropriate steps to assess more completely the impact of the termination of USAID support to comedores.

This might include some or all of the following:

- ▶ the funding of a follow-on "Vigilancia Nutricional" study in Lima in the areas that were studied in 1991;
  - ▶ arranging for some expansion in the scope of the up-coming study of comedores on behalf of the Office of the Presidencia;
  - ▶ facilitating and supporting as necessary the implementation by the cooperating sponsors of the recommendations made below to them.
2. That USAID consider prolonging for another year or two its assistance to comedores, even if at a reduced level, particularly if the more complete assessment recommended in 1. confirms the concerns of the evaluation team.

In the interim, USAID could explore possible replacements for at least part of the reduction of USAID assistance to the comedors. One possibility might be to encourage the European Union to pick up for a year or two some of the comedores dropped by USAID.

3. That CARITAS/Lima increase and specialize its training activities to comedores that are still being supported with food to prepare them for when the food donations terminate.
4. That CARITAS/Lima and CARE follow up with comedores that have recently lost their support, but which are still functioning, to determine the following:
  - a. Would additional training or consulting services increase their chances of survival?
  - b. Have they found new ways to cope (e.g., starting gardens)? Are these new ways replicable?

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- c. What has happened to the "social cases" that have been dropped from the rolls of the comedor?
  - d. What has happened to the members who have left the comedor as a result of the raising of prices?
  - e. Have the comedores found other sources of assistance? Would they be available to others?
5. That CARITAS check periodically with health centers in the poor areas where they operate, or have operated, to determine if the centers are treating an increasing number of illnesses of children under six or of pregnant and lactating mothers.
6. That CARITAS/Lima explore other means, possibly through the Mothers' Clubs or other communal organizations, to establish an early warning system of food deficiency/elevated health problems.

AnnexC.R44

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**ANNEX D**

**AGRICULTURAL DEVELOPMENT PROGRAMS**

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## I. INTRODUCTION

The agricultural development program, using food-for-work and proceeds from the monetization of foods, has sought to enhance food security through interventions to increase the quantity and improve the nutritional quality of food produced on small farms mostly in the Peruvian *sierra*. Figuring in this effort have been irrigation, soil conservation, agro-forestry, greenhouses, better cultural techniques, credit, and better roads. This evaluation assesses the work of three non-governmental agencies in these activity areas: CARITAS, ADRA/OFASA, and CARE. It does not look at PRISMA's irrigation work during the severe recession of the early 1990s, or at the work of PASA, a program born of that severity, because these interventions are small when compared to those of PRISMA's other activities and to those of the other agencies.

### A. EVALUATION METHODOLOGY

The evaluation team, representing agronomic and socio-economic expertise and numbering from three to six Peruvians and one North American, all with Peruvian field experience, reviewed project literature and visited field sites in Cajamarca, Ayacucho, Cusco, and Puno Departments over a period of about three months. The team held 89 focus groups, 32 with beneficiaries, 27 with women, 28 with members of development committees and 2 with extension agents and promoters. Over 50 interviews were held with regional governmental officials, key informants, agency personnel, GOP officials, promoters, extension agents, and USAID employees.

Sites for the field visits, selected in consultation with the agencies, were chosen so as to provide agro-ecological variety; Peru is a country where neighboring valleys may differ significantly one from the other. The sites also provide socio-cultural variety. The Cajamarca site is not Quechua-speaking, whereas the Ayacucho and Cusco sites are; the Puno site is Aymara-speaking. The choice of sites was also based on the need to see the range of interventions and to provide three operating instances (or zones) for each agency. To the extent possible, sites were chosen so as to minimize possible influences from the activities of other agencies. Lastly, the sites had to be accessible.

### B. PROJECT BACKGROUND AND SETTING

To understand the Peruvian milieu over the six-year period of this evaluation (1990-1995), it helps to reflect on the country's recent history. With the election of Fernando Belaunde to the presidency in 1980, Peru emerged from more than a decade of "military socialism" with bloated bureaucracy and weak public institutions. Public capacity for agricultural research and extension had declined markedly, and some of the best technical talent had already left Peru. Belaunde tried to reverse the years of interventionism, but his agricultural policies subsidized food imports to keep urban food prices low and, in other ways, disfavored peasant farmers.

Also appearing in 1980 was Shining Path, maybe the most violent guerrilla movement ever to emerge in the Americas. Violence grew during the 1980s, when the movement became a serious threat to the Peruvian State, and did not subside markedly until about 1993, with the capture of top movement leaders. The violence disrupted work routines and patterns of life all over the country, but more so in some areas than in others. The disruption was extreme in Ayacucho, home of the Shining Path. As a result, widowed women now head upwards of 30 percent of the households in some rural communities in Ayacucho.

A "boom within the crisis" has also deeply affected Peru's society and economy over the past quarter-century: the international drug trade. An agricultural census in 1969 showed 18,000 hectares of coca, a crop cultivated since pre-Inca times in the moist river valleys along the lower slopes of the eastern range of the Andes. Drug traffickers and the Shining Path, often the same, have dominated the coca-rich Huallaga Valley, which in Peru has become a metaphor for violence. The drug trade also fosters an environmentally destructive cycle: migrants clear the forest and plant coca, using no agro-chemicals and taking a harvest or two before tired soil drives them to another site. The trade further harms the environment by releasing drug-processing chemicals into local rivers.

Coca production rose sharply toward 1987; since 1990, it has spread from the Huallaga valley to other valleys in response to increased world demand for cocaine and in response to the continuing destitute plight of peasants pressed by poverty, too little land, and frequent drought. By 1990, Peru produced 60 percent of world coca. In 1992 129,000 hectares of coca were being planted (U.S. government estimate); by 1995, it was still at a level of over 115,000 hectares.

A large number of the peasants from the regions where the Title II agricultural work has become focused have for many years formed an eastward-moving migrant stream, some looking for new homes, others looking for temporary work and income. Many farmers interviewed for this evaluation had worked coca in the eastern valleys. Because coca prices have fallen sharply in the past several months, many peasants are now returning to the uplands (or going to the coast). Some of them had planted only coca and now were without food, as destitute as ever. Hence, it is a critical time for expanding agricultural support activities in the .

By the close of 1993, the government had incarcerated leaders of Shining Path and violence was in decline. Recent years have seen low inflation, some economic growth and macroeconomic improvements, and increased private investment. Incomes, however, remain highly skewed; gains have yet to be felt by many in the middle class, hardly at all by the poor. Peru continues to be a desperately poor country, with the deepest poverty found in the countryside, especially in the central and southern where the Title II agricultural programs here described have been active.

The violence profoundly conditioned project activities during the period 1990-1995. Many rural areas were unsafe for project personnel. CARITAS requested of USAID that commodity foods be shipped in two kinds of bags, some with and some without U.S. markings. The latter was for distribution in high-risk areas.

CARITAS largely remained active in the troubled areas, but ADRA/OFASA was not able to operate in some areas because of the violence. CARE, not wanting to subject its workers to risk, subcontracted with two national agencies to continue activities in the departments of Ayacucho, Huancavelica, and Apurimac. After the drop in violence in late 1993, the agencies returned to the once violent areas and even expanded operations, with special emphasis on increasing production.

### C. PERUVIAN INSTITUTIONS AND POLICIES

Years of sporadic economic intervention, with violence and economic chaos in the 1980s and early 1990s, have greatly weakened Peru's public agricultural research and extension institutions, including the universities—and especially the National Agrarian University (La Molina), which in the late 1950s ranked among the premier agricultural schools in Latin America. Institutional reorganizations (16 since 1960) and name changes have occurred so often that some Peruvians in the Ministry of Agriculture are unable to describe the remaining residual system, with its numerous period pieces. Between 1990 and 1995, CARE's Altura Project counterpart agency changed three times as a result of Ministry reorganizations.

Government agricultural policy, which has moved irregularly between varying degrees of interventionism and liberalism for 40 years, never holding long to any one course, has not favored small farmers, who nonetheless supply most of Peru's perishables. Current policy, for example, relies on the private sector for research and extension, but that policy is feasible only with larger-scale commercial farmers on the coast.

When the much-politicized Agrarian Bank went into crisis, the Fujimori government closed it in 1991 as part of the reforms liquidating inefficient State enterprises, and introduced cajas rurales. But these have not benefitted small farmers, who for several reasons have historically not been deemed good credit risks.

Markets are in general little developed; two Lima wholesale markets fix the prices of most perishables, and bad roads in remote areas, combined with few on-farm storage facilities, leave poor farmers prey to middlemen supplying urban wholesalers.

Many land parcels are neither registered nor titled in Peru. Scarcely a fifth of the country's 5,022 officially-recognized peasant communities were titled in 1993. A land law was recently passed, but its regulatory codes (*reglamentacion*) have not yet come out. The new law is said to respect indigenous communal properties. A water law is now pending before Peru's parliament, but debate will likely be prolonged, because water is a scarce commodity in Peru. The government, which now holds exclusive rights to water and grants licenses for a fee (said to be low for a scarce commodity), wants to privatize those rights and let the market allocate water usage. Those opposed argue that such a scheme would favor larger farmers and the wealthy.

#### D. OVERVIEW OF AGRICULTURAL DEVELOPMENT ACTIVITIES

The three cooperating sponsors operate somewhat different types of programs, and these will be discussed in separate sections below. To help put their programs in perspective, there follows in Table D-1 information on the number of beneficiaries being served and the amount of food being distributed annually by each agency during the 1990-95 period.

**TABLE D-1**  
**Food Distributed and Beneficiaries Served Under Food for Work Program**

AGENCIES	1990	1991	1992	1993	1994	1995
<u>ADRA/OFASA</u>						
Beneficiaries (000s)	150	151	331	268	175	170
Percent of Total	34%	23%	46%	36%	25%	27%
Food Distrib. (MT)	12	12	12	14	17	12
Percent of Total	60%	38%	44%	48%	47%	45%
<u>CARE</u>						
Beneficiaries (000s)	56	50		90	101	107
Percent of Total	13%	7%		12%	14%	17%
Food Distrib. (MT)	2	2		2	3	2
Percent of Total	10%	6%		7%	8%	7%
<u>CARITAS</u>						
Beneficiaries (000s)	228	468	380	380	428	350
Percent of Total	53%	70%	54%	52%	61%	56%
Food Distrib. (MT)	6	18	15	13	16	13
Percent of Total	30%	56%	56%	45%	45%	48%
<u>TOTALS</u>						
Beneficiaries (000s)	434	669	711	738	704	627
Food Distrib. (MT)	20	32	27	29	36	27

SOURCE: AERs

The data utilized are the Food for Work figures from the Annual Estimate of Requirements (AERs) — excluding the emergency food for work programs in 1990 and 1991. It is recognized that there can be some variation between the estimates and the actual distribution and that not all Food for Work commodities have been used for agricultural development. These data, however, appear to be the best proxy that is available on a reasonably consistent basis for the three agencies and for all of the years.

According to the data, ADRA/OFASA has generally given the largest rations per beneficiary, CARE the smallest — in the ALTURA program beginning in 1993. On average during 1993-1995, a ton of food would have supplied a year's rations for 14 people in the ADRA/OFASA food for work program, 28 in the CARITAS program, and 44 in CARE's ALTURA program.

## II. ADRA/OFASA AGRICULTURAL PROGRAMS

### A. PROGRAM DESIGN AND IMPLEMENTATION

ADRA/OFASA's agricultural and integrated rural development activities are carried out in 88 communities in 5 Peruvian highland departments: Ayacucho, Junín, Huancavelica, Puno and Cusco, encompassing 8 provinces: Huanta, Huamanga, Puno, San Román, Huancayo, Tayacaja, Canchis and Quispicanchis. This includes 27 districts and populated centers with a total population of 9,000 families and 45,000 people.

The goal of the program is to increase food availability on small family farms by increasing production and productivity. The specific objectives are: (1) to increase yields 30 percent over traditional yields on 300 hectares in 60 communities; and (2) to increase market sales by 12 percent in those same communities.

The strategy for reaching these objectives includes:

- promoting the use of improved seeds, fertilization (chemical and organic), and treatment of disease, utilizing three-hectare demonstration plots in each community;
- ▶ establishing rotating credit funds to provide capital to family units;
- ▶ promoting soil and environmental improvements;
- ▶ improving production infrastructure — irrigation and crop storage;
- ▶ promoting activities to add value to product and to assist with marketing; and
- ▶ promoting activities to improve nutrition, health, and home care.

The project targets extremely poor families in the high Andean *sierra* using information at the district, community, and family levels to establish need. In Ayacucho, the project works with families much affected by the rural violence, making an effort to help them rebuild their production systems. In Cusco and Puno, greater reliance in community selection was placed on census and other data, but security issues also entered into the selection of sites in Cusco. In Puno, the project helps families reconstruct their productive systems from the aftermath of violence and extreme drought.

The project sites visited by the evaluation team in Cusco and Puno were located on primary roads connecting moderately developed sub-regions that include communities with varying poverty conditions. In the case of Puno, the beneficiary communities were also located in the area around the lake, not necessarily concentrating on the most needy populations.

Most projects operate like the one visited in Ayacucho. In each community, work groups are formed to engage collectively in work on a three-hectare parcel, usually rented from an absentee owner. Crops planted include potatoes, corn, and amaranth (a traditional Andean grain). Rent is paid in kind: improvements to the land and 15 work days to the owner. The group works collectively on a weekly basis, under the guidance of a local promoter and a project extension agent.

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The project provides technical assistance and training for community promoters. In addition, it provides in-kind loans for seeds, fertilizers, and pesticides. The proposed manner of extending credit has been modified. Instead of credit to individual families, credit is extended to a small group of farmers working the land collectively. This system appears to be efficient in the assignment and recovery of funds. Delinquency rates are low. However, food receipts are tied to debt payback, so that from the farmer's perspective, not paying the debt may cost more than paying it.

The soil improvement activities of the project are achieved through terracing, slope cropping and infiltration ditches. These activities are technically adequate and, in most of the locations visited, have been technically supported by other programs, such as PRONAMACHS of the Ministry of Agriculture.

In the improvement of infrastructure, support has been given to the cleaning of irrigation ditches, the construction of stores for tuber seeds, and in some cases support to the construction of educational and social service infrastructure. In the locations visited, it was made evident that these activities satisfied the most deeply felt needs of the population, even the construction of a municipal building which might not seem justifiable to an outsider.

Child development and growth control activities — including inoculations and improvement of child hygiene — were carried out. Prenatal control was also implemented. The population was trained in the best use of the donated food (preparation of omelettes, noodles, and recipes). The beneficiaries showed positive attitudes toward these practices. However, this component of the project was not specifically evaluated.

The participating families receive 12 food rations during each trimester as a stimulus to collective work. About 40 percent of the harvest goes to replacing the seed, with the remainder for sale and domestic consumption. Families return to the rotating credit fund S/6.00 monthly and S/10.00 each trimester for the transport of the donated food.

The funds typically lose money — when seed is returned in kind, its quality may be inferior or the market price may have dropped.

There is no technical study of the marketing plan. It is assumed that there will be surplus production to process and market. The evaluation could not verify such surpluses. Further, the marketing plan proposes to improve information available regarding markets and prices, but no resources have been allocated to do this.

## **B. PROGRAM MONITORING AND SUPPORT**

Since October 1995 a three-person rural development team (agronomists--ingenieros) has resided in Cusco and in Puno. Each three-person team attends to 18 projects in 6 or more communities. Each project involves about 150 persons — for a total of 2,700 persons per team. In Ayacucho a single agronomist located in Huanta attends to 900 families in 15 settlements, and supervises work on 45 communal plots.

There is an Executive Committee (*Comite Directivo*) in each community that organizes project activities. Community-based voluntary promoters work with project technical staff to support, monitor and evaluate activities.

The project design calls for six promoters, three for agricultural matters and three for social matters, but this has not been followed. The design also calls for a Rotating Credit Fund Committee in each community to keep records on input delivery, loans, and collections; these have not functioned in either the Cusco-Puno or Ayacucho areas.

In Ayacucho, the training of staff is virtually non-existent. In 1995, the most important training event was one on "Small-Farmer Communication," which promoted the use of the Logical Framework for planning.

Some beneficiary training is conducted using videos made by CESPAC on vegetables and Andean crops, and ADRA/OFASA has also produced materials on Andean crops, seed selection, fertilization, potato disease, and vegetables.

The bulk of training at the beneficiary level is conducted by promoters who direct the work of small groups of farmers. A Technical Supervisor visits the plots every 15 days, his most important job being the identification of crop disease and the application of pesticides. The voluntary promoter works with him and learns from him on these visits. In Ayacucho, all this occurs on the communal plot, with the resident agronomist determining the dosages and applying the pesticides and fertilizers. Because of the low level of education of the farmers, no effort is made to transfer this knowledge to them.

Weekly meetings of the communal work groups are also a time when instruction is given in health, nutrition, and home management (*administracion del hogar*). The health and nutrition components are similar to those offered in the maternal-child health activities of ADRA/OFASA. No training is given in organization or management. Relations with other private or public agencies are not promoted.

### C. PROGRAM ADMINISTRATION, SUPERVISION, PLANNING

In the southern zone (Cusco and Puno), the project is under the jurisdiction of the Regional Office (Direccion Regional) in Cusco. The project in Ayacucho is under the supervision of the National Coordinator.

The Technical Supervisor (resident agronomist) visits communities at least bi-weekly, and often weekly, and meets promoters and members of the Executive Committee to review the work. The Committee keeps a register of activities and work assignments, which is important in distributing food incentives. Progress reports are prepared quarterly and sent to the regional office, which transmits them to the national office. The Regional Director visits the Technical Supervisor about every 45 days, and a national supervisor visits randomly-selected projects every four months.

The *Comite Directivo del Proyecto*, working under the *Junta Directiva Comunal*, is the body in each community charged with organizing and implementing project activities. It ranks on the level of the Mothers' Club. The *Junta Directiva* develops strategic relations with development agencies. The *Comite* is weak in terms of record-keeping and formal agreements with outside agencies. These local organizations are "schools" in which community members learn to conceptualize problems, take decisions, and deal with outside agencies. This knowledge is sustainable, and working with these groups is a first step toward institutionalization of the organizations.

Program planning is done at the main office; the Logical Framework is used as a tool in the process. At the regional level, an activity schedule is prepared in accordance with the Multi-year Operational Plan.

### D. PROGRAM IMPACT AND SUSTAINABILITY

The impact of the project can be looked at in macro and micro terms. From the macro point of view, the project was affecting 330,000 people in its peak year (1992), averaging over 200,000 annually over the period 1990-1995. This was almost one-third of the total number of beneficiaries under the Title II Food for Work program. It was a significant number, but still quite small in relation to the total needs in the five departments.

In terms of meeting the needs of the severely impoverished, the impact was quite small. Although project operations were located in provinces included on the extreme poverty map in four of the five departments in which ADRA/OFASA operates, none of the project sites were located in districts on the extreme poverty list. This does not mean that extremely impoverished families did not participate in the project, but it does say that the projects were not located in areas of highest poverty.

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On the micro level, the field evaluation team looked at six factors that were expected to yield indications of project impact. Their findings are summarized below. For a more complete presentation of their findings, including quotes from project beneficiaries, see Volume IV of the IIN report. For some accomplishments data for the period, see Attachment 1 to this annex.

***1. Families had adopted the proposed technology increasing their production and productivity and thereby improved their food self-sufficiency.***

The participation of families per community in the nine areas visited varied from 40 percent to 90 percent with a mean of around 65 percent. The number of families participating remains high even where food assistance has terminated.

Differences were observed in the adoption of the proposed types of technology. **Process technologies**, involving the use of more efficient and effective productive practices, had the highest impact. The following process components included in the transfer of technology package of the ADRA/OFASA program are compatible with the farming practices of most of the high Andean peasants (negative risk approach which calls for a low use of external inputs) and are expected to be sustainable:

- Land preparation for inter-tilled crops
- Row and drop sowing with adequate spacing
- Mass selection of grain seeds
- Ridging and timely thinning
- Furrow irrigation technique
- Crop rotation

The lowest impact was observed in **product technologies**. The transfer of product technology is not sustainable because it depends on external inputs. The technologies (e.g., chemical fertilizers and pesticides) are used on the demonstration plots — ADRA/OFASA is paying — but seldom on individual plots. The adoption issue was not due to ignorance; rather it was associated with costs (these inputs cannot be afforded by families in extreme poverty and conditions of food insecurity). Such outlays are not compatible with the negative risk approach of the majority of high Andean peasants.

The project promotes single crop farming, a practice that contradicts the peasant rationale which favors the spread of risks. Most of the beneficiaries have not adopted this proposal and companion crops continue to be the rule.

The peasants in the high Andean area showed preferences that have not been included in the design of the project. In keeping with the productive capacity of the area, there is a great demand for cattle breeding (cultivated pastures, genetic improvement, credit). Agriculture comes second, and in the case of Puno, greenhouses are in third place. The latter would probably disappear if it were not for the food assistance.

Raises in production and productivity were observed. Even considering the strong variability of these indicators as a function of exogenous variables not controlled by the project, such as the climate, the peasants confirm the positive impact that the promoted technologies have had. In Cusco, they indicate that the land preparation, seed selection, ridging and weeding practices have brought about an improvement in production.

In **Ayacucho**, the majority of companion cropping farmers reported a larger production of maize. However, it is not possible to estimate the total productivity per hectare, because the farmers never take into consideration the companion production or the stubble for the cattle which is larger in companion crops. Significant changes were also identified in **Cusco** (e.g., from use of a new yellow corn variety), but it is still too early to make a precise appreciation of the potential impact.

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The program has also introduced **cultivated pastures**. In an area with a strong cattle raising potential, such as the high provinces of Cusco, peasants are very attracted towards this crop and were adopting the technology on their own plots.

The evaluation team also found a positive impact on farm consumption, which had increased in spite of the randomness of production and productivity due to the extreme climatic phenomena (droughts, frost, hail).

## ***2. Families participating in the project have capitalized their farms and invested in their households.***

The support provided for the reconstruction of the productive base of the families affected by violence in an area where almost no other NGOs operated, and where the promotion role of the State is just returning has been of key importance. In Ayacucho the families stated that the project has allowed them to recover the capacity and productivity lost during the violence period:

"Two years ago there was nothing here. We are farming now."

"Until last year we lived in a camp up there, we went out at six in the morning and returned at four in the afternoon. We barely had time to scratch the land."

In Cusco the families improved their supply of seeds of potatoes. In other areas, farmers reported growing and storing the seed from new yellow corn varieties. Although there is not sufficient evidence to associate the acquisition of tools with project action, some growers say that it is easier now to obtain tools. Some families did acquire cattle for fattening and sale, but they said that this was not related to activity of the project.

Only in Cusco was evidence found of the improvement, construction and equipping of living quarters. Even this change affects a very small proportion of the participants, e.g., the peasant communities recently incorporated into the market with the reconditioning of the Sicuani-Cusco road.

The provision of seeds acquired outside the area or in the local market is not sustainable. It depends on the usually extremely low incomes of the beneficiaries and their negative risk approach. On the other hand, the provision of seeds by mass selection from the farmers' own production or by genetic refreshment as a result of activities such as local seed fairs, is sustainable. This, however, is an aspect which has not received much attention.

The provision of other inputs, such as compost, is sustainable where there is a good source of organic remains available. This technology could be improved. The investment in the acquisition of tools shows a higher sustainability.

## ***3. Families have used the Agricultural Revolving Fund, and the Fund has increased its resources.***

The Revolving Fund is meeting a felt demand. The percentage of families using the Revolving Fund varies from 46 percent in Ayacucho to 75 percent in Cusco. In all areas more than half the families are using the Fund.

The Revolving Fund operates in various ways in different areas. Loans may be granted to groups or to individuals (e.g., in Cusco). The loans may be used for a community planting crops in rented plots, in community areas, or in temporarily assigned private land. The loans are mostly granted in kind (e.g., farming inputs). In most cases, the borrowers do not know the global amount of the loan. They know that it should be repaid at the end of the cropping season with, for example, a part of the potato harvest.

In areas such as Puno, the Fund is also a collective savings mechanism for the financing of productive or service (educational) infrastructure responding to the needs of some sector of the local community.

Although the method of loan recovery varies from repayment in kind (e.g., 50 percent of the harvest to ADRA) to repayment in Soles at the updated value of the supplied inputs, the rate of past due indebtedness was low or nonexistent. There is a strong incentive to repay, because those that keep their debts current will receive food. ADRA/OFASA continues to operate only in communities that honor their obligations. It is not clear whether the system would be sustainable if no food were being distributed.

In most cases, the Fund has become de-capitalized. In Puno, the engineers reported that the Fund has annual losses of 20 percent. In the past year, in an effort to avoid losses, the methodology was adjusted to grant credits in U.S. dollars and charge interest. The de-capitalization has been higher in the cases where the credits have been repaid in kind. This has resulted from (a) the quality of the inputs paid back (potato seeds) are of lower quality than those received; or (b) the prices of the input is less at the time of repayment (end of the harvest) than when they were purchased by the project (at planting time).

***4. Women participating in the project saw an improvement in the social recognition of their role and their self-esteem was raised.***

In the *sierra*, a high percentage of households are headed by women, particularly in the areas most affected by violence. In Ayacucho, 27 percent of the beneficiary families are headed by a woman. In general, the participation of women in the project is high because the women, in contrast to their husbands or sons, generally cannot take advantage of income generation opportunities outside their community.

With respect to equity in the distribution of family responsibilities, no changes were perceived which could be attributed to the project. Less than half the women reported that their husbands helped in the kitchen or in the care of the home when the women had to work outside of the house. None of them said that their husbands were responsible for taking care of their children.

Very incipient changes in women's social organization and participation were observed in the locations visited. They are associated, however, with the social recognition that women now contribute through their work outside of the home.

In some cases, changes were perceived in the social representation of women. They were presiding over the governing committees of the project or participating as leaders—assuming responsibilities which required the qualities associated with their gender, such as greater honesty, discipline and order. In Cusco and Puno, limitations such as illiteracy or the lack of command of the Spanish language were perceived as holding back improvements in women's social representation.

An important change was perceived in the self-esteem of women. There has been an improvement in their socialization, in their inter-relation with other women. In most cases, women feel at ease working together. They feel satisfied with what they are doing. They also recognize that they have gained respect from their mates.

***5. Families improved soils, reduced erosion, and increased production and productivity as a result.***

In the areas visited, the degree of participation of the families in conservationist activities varied between 60 and 75 percent of the total population of the communities. The beneficiaries have a clear perception of the positive impacts of the conservationist activities. The impact is greater in areas with a higher agro-ecological potential.

In Ayacucho, forestry plantations (primarily queñua and eucalyptus) and infiltration ditches are being introduced in a community of the Quechua area (Villaflorida). These are primary soil conservation activities for the control of runoffs by profiting from the soil infiltration to store the water for use in times of drought.

The conservationist practices are being maintained, and their adoption is being expanded to other areas. The cropland expansion indicator was not corroborated. It was reported that all the cropland is used — other than that allowed by design to remain fallow.

With respect to the expansion of the irrigated area and production increase indicator, there were no indications that a more intensive use was being made of dryland areas. Irrigated lands, however, are permanently used producing two harvests. The farmers indicate that with the new activities there is a substantial improvement in the use of irrigation. Improved irrigation also brought about an unexpected impact: a decline in intra-community conflicts.

With respect to the improvement in the quality of the seeds available to growers, several communities, with project support, have constructed potato (or tuber) seed stores.

Local roads improvement has resulted in an improvement of service to the community: "The truck can come and we can send out our products." Paths have also been improved, making it safer to take products from the farms to main roads or market.

It is expected that some conservationist practices will be sustained: the improvement of irrigation, local roads, and the quality of seeds. This expectation is based on the following findings: (a) there was increasing individual initiative observed in the implementation of these practices; (b) beneficiaries identified specific advantages derived from the program; and (c) acknowledgement of the benefits obtained from the cooperation among community members in enforcing conservation practices and improving irrigation channels.

General soil conservation activities, on the other hand, are probably not sustainable without food assistance. A significant number of those interviewed stated that, without food, they would not be able to continue making ditches.

In areas such as Puno, conservationist activities were not a priority in the communities visited. Apparently, actions were implemented only as a consequence of the food for work arrangement.

#### ***6. Promotion of local development was institutionalized locally.***

The existence and operation of a governing committee of the project in each of the base units was confirmed. This committee is considered the specialized executing body of the governing council of the community. It is the body responsible for the organization and implementation of the activities of the project. It assigns the tasks, supervises operations, and records the work performed by each member. The experience gained in these activities provides useful training for other functions.

The institutional capacity of the committees was found to be weak with respect to its formality (minutes, agreements, etc.). However, committee members showed knowledge, efficiency and pride in the management of the project. According to community leaders, the project has fostered an attitude of service to the community.

A local development plan, as such, is not being executed. However, the communities implement local development activities as agreed upon by consensus in community meetings. The members of the community indicate that their organizational capacity to undertake local development activities has been enhanced. There is a much higher positive response to collective labor, and this is one of the key factors for development investment.

On balance, the improvements in local organization for development in the communities appear sustainable.

#### **E. CONCLUSIONS**

1. The ADRA project is having a favorable impact in helping farmers to re-establish a productive base after the long years of violence (especially in Ayacucho) and the 1990-1991 drought.
2. The project is also having a favorable impact on soil conservation, erosion control and irrigation, and the results, at least of the latter two, are likely to be sustainable. Between 60 and 75 percent of the total

population in the area participates in the project, and the benefits of these activities are apparent to beneficiaries. Specific achievements include:

- ▶ Project participants in Cusco, having seen the results of terracing on the upper slopes, extended the practice to irrigated lands below. As one participant put it: "Now, most people here make terraces down the hill because terraced gardens give greater yields, the soil is easier to work and it holds moisture."
  - ▶ Participants at project sites are learning the techniques of preparing and managing tree nurseries.
  - ▶ In two communities of Cusco, the project supports the annual cleaning of an irrigation canal, improving the efficiency of irrigation and reducing the competition for water, thereby reducing social tensions.
  - ▶ The project has supported the construction of seed storage structures in several communities, and these are recognized as valuable by farmers: "The stored seed yields more."
  - ▶ Project-supported road maintenance has also been positive: "The truck comes in and takes our produce out."
3. ADRA's policy of focusing first on producing food to improve family diet, especially the diet of children, is a sound one. Promoting the growing and consumption of high-protein Andean grains (quinoa and amaranth), or vegetables where appropriate, is commendable.
  4. While there is potential for greenhouses in Puno (and probably other areas), the work with them in Puno is not viable under present arrangements: (a) Puno is a small market, and one where there is no tradition for consuming vegetables; (b) the small Puno market is supplied by vegetables at lower prices from Arequipa, Moquegua, and Tacna; (c) high labor costs; (d) farmers would prefer family greenhouses rather than the collective ones now being built; (e) the technology for greenhouse vegetable cultivation is not well developed in Peru.
  5. Some of the product technologies promoted are not appropriate to local socio-economic and/or agro-ecological conditions (e.g., those requiring purchased inputs); using three-hectare demonstration plots may not be appropriate for farmers with much smaller plots.
  6. The cultural practices that are likely to be the most sustainable are: (a) land preparation using a double cross with bullocks; (b) sowing in rows and laying seeds at the proper distance (*por golpes*); (c) improved grain-seed selection; (d) organic fertilizing; (e) timely berming (*aporque*--for water control) and weeding; (f) crop rotation.
  7. Livestock interventions might be of great interest and value to communities in the high zones of Cusco and Puno.
  8. The impact of the project could be further improved by:
    - ▶ increasing the number of people available to implement and monitor activities and/or reducing the geographic spread of the activities;
    - ▶ fostering more local participation in planning, monitoring and evaluation activities, including more participation by women in decision-making bodies;
    - ▶ conducting soil analyses before deciding on fertilizers;

- ▶ obtaining seed of better genetic quality, especially for potatoes, wheat, and barley;
- ▶ searching for low-input technologies and using credit as a last resort;
- ▶ trying to understand the logic (agro-ecological and socio-economic) of the traditional system before intervening: inter-cropping (e.g., corn and beans) may make sense to farmers, and farmers may also value a particular maize variety not only for grain quality but for the amount of leaf on which cattle feed after the grain harvest;
- ▶ ensuring that interventions are consistent with a community's felt needs, e.g., agriculture vs. livestock;
- ▶ ensuring that the market is viable if production is for market; and
- ▶ working with other organizations to develop a more sustainable credit system.

### III. CARE'S AGRO-FORESTRY PROGRAM

#### A. PROGRAM DESIGN AND IMPLEMENTATION

From 1993 forward, CARE's agricultural interventions in the have been carried out under the ALTURA project. ALTURA is a follow-on to, but a modification of, the ARCA project. The latter was a CARE reforestation project which terminated in 1992. In response to USAID's new food security strategy concepts, ALTURA's objective was modified from a purely forestry approach to a focus on increasing the production of food crops in improved soils, incorporating agro-forestry, reforestation, and soil conservation. Activities to achieve the objective include establishing community nurseries (replacing large State nurseries), fostering the use of native agro-forestry plants and improved nursery management, and the planting of fruit trees, vegetables, and Andean crops.

The components of the ALTURA project are:

1. community promotional activities, consisting of organizing the participants and training them in agriculture, planning and agroforestry management activities;
2. agroforestry, understood as the combination of trees within an agriculture system, with the purpose of obtaining benefits from the tree-harvest interaction, reducing harvest risks and allowing for product diversification;
3. soil Conservation, which is a combination of different steps for erosion control and increase of soil humidity, sustaining increased agricultural productivity and increasing the amount of cultivable lands;
4. massive reforestation, consisting of establishing tree plantations (without including any crop) for obtaining timber and wood, using native as well as exotic species;
5. food harvest production, which includes a variety of promotional activities and training in the production and harvesting of vegetables, tubers, legumes and grains; and
6. credit, provided through revolving loan funds, for purchasing materials needed in agricultural activities, including for utilizing conservational practices.

The project targets poor families with low levels of food security in the Peruvian . Sites were selected by prioritizing districts using the NBI (Basic Needs Indicators) listing and working in micro-watersheds given priority

by its project implementation partner PRONAMACHCS (Programa Nacional de Manejo de Cuencas y Conservacion de Suelos--National Watershed Management and Soil Conservation Program). Table D-2 below shows, by department, the number of provinces, districts and communities in which the ALTURA project operates and indicates which of the locations are on the listing of provinces, districts and communities having the largest share of people living in extreme poverty. Some 42,000 families, representing 189,000 people, are participating in the program.

TABLE D-2

## Distribution of CARE/ALTURA Sites by Extreme Poverty Districts

DEPARTMENT	NO. OF PROV. IN DEPT. WHERE WORKING	NO. OF PROV. ON EXTREME POVERTY LIST	NO. OF DISTR. IN PROV. WHERE WORKING	NO. OF DISTR. ON EXTREME POVERTY LIST	TOTAL NO. OF PROJECT COMMUNITIES	NO. OF PROJECT SITES IN E.P. DISTRICTS
ANCASH	4	1	5	0	62	0
APURIMAC	2	2	5	1	39	5
AYACUCHO	1	1	1	1	42	42
CAJAMARCA	3	1	7	0	74	0
CUSCO	6	5	18	1	72	8
HUANCAVELICA	1	0	9	0	63	0
JUNIN	4	0	15	0	50	0
LA LIBERTAD	2	1	10	1	68	4
PUNO	3	1	8	0	49	0
<b>TOTALS</b>	26	12	78	4	519	59
<b>% ON E.P. LIST</b>		46%		5%		8%

E.P. = Extreme Poverty. The "Extreme Poverty" list used was that attached to Resolucion Ministerial No. 353-95-PRES of 8 September 1995 which approved the directive for the formulation of the plan for the campaign against poverty 1996-2000.

Key to the ALTURA strategy is food-for-work, which is used as an incentive in a phased manner. During the first year of the project, food is distributed to alleviate the local food scarcity and to promote activities in soil conservation. The second year food distribution is maintained and seed production is introduced. The third and fourth year conservation and reforestation activities are maintained without food support, but with CARE's supervision. In the fifth year, the community is to "graduate," sustaining the techniques and practices of improved resource management and more secure food supply.

Food distribution methods vary according to the kind of activities in which the beneficiaries participate. In the case of activities where beneficiaries are working communally (seedlings production, tree planting and soil conservation in communal lands), the participants receive a complete ration equivalent to 1 kg. of rice, 0.375 kg. of maize flour, 0.375 kg of lentils and 0.10 kg. of edible oil per work day. In the case of activities where the beneficiaries are working individually (agroforestry, soil conservation, and tree planting on family lands), they receive a third of the above mentioned ration.

After a community is selected, the following activities occur: a diagnostic survey; organization of a *Comite Agroforestal*; training of promoters; promotion of soil conservation and the preparation of a communal nursery; planting of tubers, vegetables, and Andean crops; preparing a monthly register of beneficiary participation; tri-monthly distribution of food (as a work incentive); and an annual evaluation and follow-on planning.

## B. PROGRAM SUPPORT AND MONITORING

There is a regional coordinating project entity (CODEPA--*Comite Departamental del Proyecto Altura*) made up of the CARE regional representative and the heads of PRONAMACHCS regional directorates. CODEPA functions largely to channel resources down from CARE/Lima.

In accordance with an arrangement with CARE, PRONAMACHCS supplies extension agents with related logistics and administrative support. The evaluation team estimates that PRONAMACHCS commits 20 to 25 percent of its personnel resources to the ALTURA project. PRONAMACHCS extension agents, usually agronomists, are charged with training and giving technical assistance to community-level promoters and participating farmers. Through the arrangement (*convenio*) between CARE and PRONAMACHCS, the latter is charged with supervision and follow-up on technical matters.

The ALTURA project also receives support from another CARE project, ANDES, which works through an agreement with the International Potato Center to work with integrated pest management technologies. Some of ALTURA's extension agents have received training under this project. Rural development activities by other agencies, such as FONCODES, INADE and CARITAS, reinforce CARE activities in some areas.

In each community a local *Comite Agroforestal* is charged with planning, coordination, and implementation. In villages in Ayacucho with a strong community sense, there may be a six-member *Comite de Desarrollo Comunal* charged with this responsibility. In Cajamarca, in villages with less sense of community, there are *Grupos de Trabajo Organizado* who engage in collective work on the land of each group member.

The Manual for Agro-forestry Extension is used to train extension agents. The extension agents are charged with training the promoters, using the same Manual. However, the focus of ALTURA training is on the extension agents, not on the promoters. The extension agent training is lost to the project because the extension agents belong to PRONAMACHCS which rotates them often.

Beneficiaries receive training monthly from extension agents and promoters in the construction of terraces, management of nurseries, and crop cultivation practices. The training takes the form of "learning by doing."

The training provided by CARE is of high quality and complex. It includes training for regional representatives in strategic and operational planning and use of the logical framework for the design and managing of projects. It also covers establishing monitoring systems and work organization. Management by objectives is taught and utilized.

The regional CARE office distributes food trimonthly to beneficiary families in accordance with information from promoters and extension agents. Food for this purpose is stored in temporary storage centers at the local or micro-watershed level. Local promoters must arrange to get the food from here to recipient families.

Funds from monetized foods go from CARE/Lima to the regional offices in accordance with programmed needs; no food is purchased on local markets.

CARE has a national system for monitoring, evaluation, and follow-up. In ALTURA, the PRONAMACHCS extension agents are key. They prepare monthly reports on activities and food requirements/distributions. These extension agents report to PRONAMACHCS as well as to CARE's regional office. Although CARE stresses the concept of sustainable food security, PRONAMACHCS' monitoring consists simply of looking at goals and activities fixed in the project implementation plan and does not consider food security. The two organizations also have different ideas about operations, handling of the revolving credit fund, criteria for food rations and personnel relations (e.g., gender issues).



### C. PROGRAM ADMINISTRATION, SUPERVISION, PLANNING

Supervision is conducted by the Regional Office, based on reports by extension agents and promoters. The presence of a large number of operating units over an extensive geographic area makes it difficult for a small project implementation staff to handle adequately the needed supervision, follow-up, and control.

The management information system consists of quarterly reports (at the regional level) comparing physical project advance against goals. These reports are cumbersome and respond largely to the demands of CARE/Lima. There is little latitude for decision-making at the local level, and this may be one reason why CODEPA plays such a limited role. The system is not designed for those at the "bottom" to communicate ideas "upward."

The evaluation team found the administrative system efficient, with financial and food resources arriving in a timely manner; no complaints were voiced.

### D. PROGRAM IMPACT AND SUSTAINABILITY

From the macro point of view, the project is affecting about 100,000 people in terms of food distribution. This was about one-sixth of the total number of beneficiaries under the Title II Food for Work program in 1995. It was a significant number, but still quite small in relation to the total needs in the nine departments in which CARE operates.

As seen from Table D-2 in subsection A above, the impact in terms of meeting the needs of the severely impoverished was quite small. Although project operations were located in 12 provinces included on the extreme poverty list, this was only 46 percent of the provinces in which the project was located; in two of the nine departments in which CARE operates, none of the project sites were located in provinces on the extreme poverty list. Only 4 of the 78 districts (5 percent) in which the project operates are on the extreme poverty list. Eight percent of the operating units (59 out of 519) are located in districts on the extreme poverty list. It should be noted that all of the operating units in Ayacucho are located in an extremely impoverished district.

Achievements nationally for the project from October 1992 to September 1995 are set forth in Attachment 2 to this annex. As of September 1995, 76 operative units had graduated, nearly 7,500 family nurseries had been started, over 10,200 agro-forestry plantations planted, 1,845 hectares had been seeded with annual crops, and 366,440 fruit trees had been planted.

On the micro level, the field evaluation team established five hypotheses, which if verified, were expected to indicate project impact. These are reviewed below.

#### *1. Participating families reduce soil erosion, keep and enlarge autonomous conservationist practices and have crops in protected areas.*

A considerable number of families have executed forestry and soil conservation activities, reduced erosion in the protected area, maintained and enlarged this area, installed crops and achieved positive changes in production, productivity, land use, food supply and sale of production.

In the nine communities in three departments visited by the evaluation team, the percentage of family participation varied between 25 and 90 percent, with participation in six of the nine higher than 50 percent.

Participants are aware of the benefits of soil conservation practices and are able to point to improvements made by the project — this signals an attitudinal shift:

"Before, we had no firewood and had to steal it from other communities. Now we have it, thanks to ARCA and ALTURA."

"The trees protect [crops] from freezes."

"Before, we didn't plant beans on the slopes, there was no soil; the rains left only rock."

Participants are learning to grow seedlings in the community nurseries and are learning the virtues of both local and exotic varieties. Both men and women engage in the nursery work.

Production gains are more difficult to estimate because of adverse climate that has affected harvest yields. However, in communities where such activities have greater time depth (Cajamarca and Ayacucho), there is evidence of such gains: "You get at least 25 percent more potatoes [on terraces]. The wheat is also yielding more. Look at this bean [grown on a terrace], it's green; on the pampa [unterraced flat land] the beans are dry from the recent freeze." (Terraced land holds moisture better.)

Expanding the agricultural frontier leads to more production, and this is occurring. The gains from productivity, however, are for the most part to be had over the longer term, with increases in the arable topsoil and improvements in organic matter.

Communities which have at least four years' experience with the project are continuing with conservation works, taking them to their own plots. They demonstrate that there are some techniques which are more acceptable than others (i.e., slow formation terraces vs. absorption terraces). The beneficiaries' assessment of the technologies have not yet been taken into account by the project in a systematic fashion.

With respect to gender, there is participation by both men and women in the project's activities. However, some specialization of functions were observed—e.g., men sift the earth, and women bag in the nursery.

There is a clear notion that food production for self-consumption has increased: "Now we have more than before, we eat more." In the case of those operative units located near markets, there is an expectation that a surplus can be produced for sale.

In the long run, agroforestry practices are expected to benefit the whole of society and other producers of the Valley's lowlands, as was observed in Cajamarca. The results include improvements in micro-climates, increased plant activity in the high altitude areas, reduction of avalanche risks, improved water retention by the ground and improved reliability of springs and streams in the lowlands.

It is too soon to speak definitively on long-term sustainability of these interventions. Several persons, including extension agent focus groups, doubt whether it is possible to achieve sustainability in four years. At the same time, there is evidence that participants are aware of benefits over the long term: "These terraces will help our children as well as the plants." In some areas (e.g., Cajamarca), there is already a long tradition of conservation.

Successful agro-forestry interventions are critical to sustainability over the medium term, because participants will be able to produce food on rehabilitated land. Forestry interventions take much longer for results to show.

## ***2. The intervention of the project develops in the local organization an orientation in favor of developing and maintaining food security and sustainability.***

The Agro-forestry Committees of the ARCA project have become the Communal Development Committees in the ALTURA project. In the evolution of the ALTURA project, these committees have also assumed the management of the revolving credit funds. A number of the committees, where the project has been operating longer, are establishing specialized committees to carry out the communities responsibilities. Young people are being included in the committees, women to a lesser degree.

The Development Committees recognize that their tasks are of a medium and long term nature. They manage their time and strategies to meet long-term community goals. In most of the areas visited, the Committees have

established community development plans. A significant development problem is the ownership of land, particularly that which may be re-claimed as a result of community conservation, reforestation activity.

The rotating credit funds as currently managed are not sustainable. The funds suffer de-capitalization because seeds returned to pay the loan are genetically inferior. Delays in repayment and food transport costs further de-capitalize the funds. Further, when all the fund users simultaneously use the fund for those crops most costly to produce and most vulnerable to the inclemencies of Andean weather (e.g., potatoes), the problem of decapitalization can be acute. Participants do not understand the workings of the fund, and depend entirely on the extension agent or others. An additional problem is the attitude toward revolving loan funds of the Ministry of Agriculture and others operating in rural areas; they consider them "lost funds." The CARE funds are being decapitalized at a rate of 20 to 25 percent annually.

The successfully adopted practices have a demonstrative effect on the community. In areas of Cajamarca there are indications that an increased number of people are initiating practices pioneered in the project.

The incorporation of hybrid seed variations presents limitations and few probabilities of sustainability. The hybrid seeds degrade quickly, thereby not maintaining their yield. Their declining value also contributes to the decapitalization of the revolving loan fund.

### ***3. Women's participation in the project's activities improves their role and raises self-esteem.***

Women participate in a large way in the project; indeed, they account for 50 percent or more of the total community population in some sites because of the high number of widows (from the years of violence) and because the men are away engaged in more lucrative activities. Overall, they represent some 36 percent of the participants. They bag tree seedlings, cut roots, and carry small stones for terrace construction.

The men recognize women's participation in conservation activities as work (in contrast to their household duties), and so they favor their participation. The social acknowledgement of the value of the women's work has increased women's self-esteem. Women point out that their participation in project activities is also enjoyable because it breaks the monotony and isolation of their lives. They also value their participation in groups where they give their opinions, share experiences, chat, and joke. The development of friendships with other women is important for them. All of this helps to make up for the overload in their work; their traditional duties are still theirs.

The women have also expressed pride that their work will allow them to improve the quality of the resources that their children shall inherit someday. They point out that they will leave their protected lands and trees for their children to produce, have timber and build their houses.

### ***4. The Project's activity contributes to reinforcing PRONAMACHCS capacity to execute conservation policies.***

The results are mixed. The ALTURA project has provided systems for monitoring, follow-up, evaluation and control of the project's activities which are of great use for the PRONAMACHCS extensionists. However, this demands a compilation of a great quantity of data on a number of forms, expanding the extensionists' workload. The extensionists value the training contribution of CARE—e.g., the Comprehensive Manual of Plagues and the Manual of Agroforestry Extension.

The two organizations have differing concepts of how to organize the community and PRONAMACHCS does not anticipate using food in its regular work. Given the fairly rapid rotation of extensionists, it is uncertain whether changes in PRONAMACHCS operations will be sustainable.

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## E. CONCLUSIONS

1. ALTURA participants are aware of the benefits of soil-conservation practices. They point to current improvements made by the project and discuss the long term benefits of the activities. This signals an important attitudinal shift. These attitudes, combined with the fact that there is high participation among young people in the project, augur well for sustainability.
2. The arrangement between CARE and VECINOS/Peru, whereby VECINOS implements ALTURA activities in Ayacucho, remains a viable one.
3. The arrangement between CARE and PRONAMACHCS needs to be revised to alleviate some of the problems in their relationship which were noted by the evaluation team:
  - ▶ PRONAMACHCS does not give the same stress to food security in its implementation and monitoring as does CARE. PRONAMACHCS extension agents see ALTURA as a soil conservation and forestry project, with activities achieved through food-for-work. PRONAMACHCS, except where ALTURA is active, does not give food to promote forestry activities.
  - ▶ CARE trains PRONAMACHCS extension agents, but much of the training is lost to the project because of their high turnover.
  - ▶ The focus of project training is the extension agents, not the promoters, but the latter are key to making activities sustainable.
  - ▶ PRONAMACHCS does not use the same norms for matching tasks to food rations as CARE does. Norms for matching tasks to food ration assignments should not be based on national averages; rather they should be defined for each region.
  - ▶ The new minister is said to have set aggressive goals for community reforestation, goals beyond the capacity of local communities (by one estimate, only 20 percent can be handled by the communities). The new scheme will more than double the plants in nurseries since last year. Such goals would have implications for ALTURA, since they raise the question of who (if not the communities) would establish the nurseries, tend the seedlings, and care for the young trees.
4. The administration of the revolving credit funds needs to be modified to guard against de-capitalization.
5. CARE should consider the following potential actions as possible means to increase the effectiveness of the ALTURA project:
  - ▶ incorporate greater local participation in decision-making;
  - ▶ give more attention to family implementation activities in contrast to the current collective implementation mode;
  - ▶ increase project implementation staff and/or reduce the geographic coverage of the project;
  - ▶ promote wider institutionalization of the project interventions in project areas—e.g., by sponsoring fair-like activities or *seminarios talleres* in conjunction with local governments, the Church, and private organizations;

- ▶ providing some leadership training to women and providing for their participation in project decision-making bodies; and
- ▶ select and improve local seed varieties in lieu of relying on hybrid seed varieties developed elsewhere.

#### IV. CARITAS'S AGRICULTURAL DEVELOPMENT PROGRAM

##### A. PROGRAM DESIGN AND IMPLEMENTATION

One cannot speak of a general design of the CARITAS program at the national level since CARITAS is a sort of consortium composed of each CARITAS at the diocese level. CARITAS/Peru is merely the head of the consortium, providing general guidelines.

The Economic Development Program of Caritas is a social welfare program designed to generate temporary employment, exchanging food for work, while contributing to rural development in the poverty-stricken provinces of Peru. The program's actions differ, depending on the diocesan offices implementing them. Each diocese has its own legal status and autonomous operation.

The Economic Development Program has no specific objectives, activities or goals. Nevertheless, the following activities are promoted using food for work:

- ▶ soil conservation;
- ▶ reforestation;
- ▶ reconditioning and construction of canals;
- ▶ resurfacing and construction of roads;
- ▶ help with farming activities; and
- ▶ community and family vegetable gardens.

The evaluation team visited the programs implemented by the dioceses of Cajamarca, Ayacucho and Sicuani (Cusco department). In the case of Cajamarca, most of the investment was allocated to soil conservation, reforestation and horticulture (vegetables). In Ayacucho, between 1990 and 1992, priority was given to distributing food to Mothers' Clubs to relieve the emergency situation created by the economic adjustment program. The activities mentioned above were carried out from 1993 on.

In Cusco, food was used entirely for collective kitchens (ollas comunes) from 1989-1992 to counter the effects of severe drought and to stem migration out of the region. Since then, it has been used for development activities — agricultural production, soil conservation, and training for production. Focus has been on organized groups of peasants. CARITAS/Sicuani works in the high zones (provinces) of Canas, Canchis, Espinar, and Chumbivilcas — all but Canchis are on the extreme poverty list. For these areas, CARITAS has promoted four technologies: (1) introduction of alfalfa as a cultivated pasture grass; (2) construction of rustic reservoirs to hold water for cattle during the dry season; (3) construction of fencing for the alfalfa plots; and (4) construction of rustic greenhouses for family vegetable production.

The Economic Development Program is under the responsibility of the Secretary General (head) of each diocese. Individual activities may be implemented by parishes of the diocese, Works Committees organized by the grass roots population, or directly by the diocese office.

The dioceses are staffed by six administration assistants and a food and projects manager. In Cajamarca, the Economic Development Program employs an agricultural expert (extension worker) and an administrative assistant

devoted to the program. In Ayacucho there are two agricultural experts (extension workers). The program in CARITAS-Sicuani has a livestock expert and a revolving loan fund expert.

In Cajamarca and Ayacucho, Title II activities function by demand. Some group at the parish level, with the support of the local priest or some agency of the State, proposes a project to CARITAS. After CARITAS locally establishes that the group has access to appropriate technical assistance, a technical proposal is prepared and sent to CARITAS/Peru. CARITAS/Peru then approves the project and assigns it food resources. The appropriate agreements are signed. Work begins and a monthly progress report is submitted. Food is assigned on the basis of these monthly reports. Beneficiaries must transport the food from the local CARITAS warehouse. In consultation with a local committee, food is assigned to project beneficiaries by the project coordinator.

In the CARITAS-Sicuani prelature, production committees have been trained to prepare the technical file and pre-qualify same. At the same time, they supervise the implementation of activities and help prepare the monthly progress report. Finally, they participate in the general evaluation of the program.

The poorest areas of a parish, as determined by the priest and others of the parish, are chosen for project activities. The information gathered by the evaluation team supports the wisdom of the targeting.

The program is geographically dispersed. CARITAS/Sicuani has started a process of activity concentration by assigning micro-basins to each NGO that depends on the prelature as well as to the members of the Consortium of NGOs in High Provinces (COPA). One of the CARITAS programs has started working in the micro-basin of the Langui and Layo lagoons.

## B. PROGRAM ADMINISTRATION AND TECHNICAL SUPPORT

Project activities are implemented through the Diocese Office run by a Secretary General. The ways of implementing projects vary. The implementor may be the diocese itself, a project within the diocese (prepared by a Works Committee) that receives funds from CARITAS, or CARITAS directly.

CARITAS/Sicuani, for example, has a *Consejo Directivo* composed of three parish priests and the Secretary General which is responsible for, among other things, works undertaken with Title II food. There is also an administrator and a multi-disciplinary team charged with programming, administering, monitoring, and controlling activities (not just Title II) approved for the year. There are also *Consejos Parroquiales* that participate in planning activities for the parish. In these there is a parish representative and sometimes several persons working on development activities. These *Consejos* channel the initial project requests for support to CARITAS.

Characteristic of CARITAS activities at the parish level is their ambitiousness in relation to the resources and personnel available to carry them out. CARITAS/Sicuani has tried to overcome this through the creation of other institutions that function much as CARITAS does, e.g., *Centro de Formacion Campesina*, *Programa de Animacion Campesina*, and the *Programa de Empleo Juvenil*. These organizations are specialized functionally and geographically.

CARITAS at the parish level has also established close relations with private and public entities that cooperate with it. In Cajamarca, the program receives assistance from PRONAMACHCS and the Agricultural Service of the University of Cajamarca. These entities provide advice on the preparation of technical files and the implementation and monitoring of activities. In Ayacucho, the CARITAS program receives considerable assistance from FONCODES to finance building materials. CARITAS-Sicuani programs receive support from Catholic Relief Services, CARITAS-Switzerland, INADE, FONCODES, and others.

CARITAS/Sicuani has established almost 100 "working units" at the communal level. In each unit, activities are conducted by a *Directivo Comunal* in which there is a promoter—usually the *Animador Cristiano*, a person chosen by the community and charged with monitoring of activities.

In Cajamarca and Ayacucho, training has taken the form of technical assistance and the mounting of demonstration practices. Farmers are learning through doing, training is on-site. In CARITAS/Sicuani, because of the participatory nature of local strategies, training is given with a view to strengthening local organization.

CARITAS/Peru provides some technical assistance to the dioceses and training in technical planning and monitoring and evaluation standards, introducing efficiency, effectiveness and quality criteria. This has been emphasized beginning in 1995.

### C. PROGRAM PLANNING, SUPERVISION, MONITORING

There is little homogeneity with regard to supervision and planning from one diocese to another. In Cajamarca and Ayacucho, there is no plan for the use of Title II resources. The program responds to demands of organized groups of the population who request food assistance for rural development activities.

In Cajamarca and Ayacucho there is no formal process for supervision. Work is supervised in order to assign the correct food rations. There is little capacity for verifying quality or for seeing that program objectives are met. In CARITAS/Sicuani, technical teams take charge of supervision. These report to the Secretary General, which in turn reports to the diocese assembly.

CARITAS/Peru tries to homogenize planning, evaluation, and monitoring so it can have a global vision of what is happening. The autonomy of CARITAS in the parishes, however, checks these efforts.

CARITAS/Peru has recently initiated systematic efforts to provide more structure for diagnosing, planning, monitoring, and evaluating (including use of the Logical Framework) at the diocese level (the PRODESA project has helped here). These efforts are still in an experimental stage, and time will be required before country-wide results will be evident.

The geographic dispersion of activities, and often their complexity, make program monitoring difficult. In the words of one local observer, "There are difficulties in applying the planning, organizational, and monitoring guidelines issued by the national organization [CARITAS/Peru], but we've managed to devise a local system for planning, organizing, and monitoring. Here in Cusco, this system depends on the participation of grassroots organizations."

In general, the capacity for monitoring Title II activities is low — in contrast to the monitoring of the distribution and use of Title II foods. Progress reports, prepared in the CARITAS/Peru format, are prepared and sent to Lima every three months. However, the objective of these reports is to guarantee the correct food allotments, not report on project achievements.

### D. PROGRAM IMPACT AND SUSTAINABILITY

From the macro point of view, the project has been providing food to around 400,000 people a year during the period 1991-1995. This was nearly 60 percent of the total number of beneficiaries under the Title II Food for Work program. It was a significant number; it was spread over virtually all of the country.

It is difficult to evaluate the impact of the CARITAS food for work programs in terms of meeting the needs of the severely impoverished because there are no centralized data showing where food for work activities are under way over the years. CARITAS has provided, however, the locations of Title II operations without identifying which ones have food for work activities. To give some data for comparison, Table D-3 below has been constructed utilizing the data provided for the same departments in which CARE is operating. It must be understood, however, that this is only illustrative — there were not necessarily food for work activities in each of the districts tabulated, and there was probably food for work activities being carried on other departments. Furthermore, it is quite likely, given the way CARITAS operates at the local level, that those receiving assistance are likely to be among the most impoverished in the community.

Accomplishment data for the period, to the extent available, are appended as Attachment 3.

On the micro level, the field evaluation team established five hypotheses, which if verified, were expected to indicate project impact. These are reviewed below.

***1. Participating families improve soil, reduce erosion and improve production and productivity.***

At the sites visited by the evaluation team, at least 50 percent of the population were participating in the activities. The beneficiaries acknowledged the benefits of soil protection and conservation, because "even animals have no use for barren land". In Alto Chaquil (Cajamarca), where infiltration ditches were being made, beneficiaries mentioned that these "prevented the earth from being washed away". Besides, "the humidity is thus maintained and it is easier to sow the land."

**TABLE D-3**

**CARITAS Title II Activity by Province and District**

DEPARTMENT	NO. OF PROVINCES IN DEPT. WHERE WORKING	NO. OF PROVINCES ON EXTREME POVERTY LIST	NO. OF DISTRICTS IN PROV. WHERE WORKING	NO. OF DISTRICTS ON EXTREME POVERTY LIST	TOTAL NO. DISTRICTS ON EXTREME POVERTY LIST
ANCASH	17	7	71	10	13
APURIMAC	7	7	42	9	23
AYACUCHO	10	8	56	8	18
CAJAMARCA	12	2	48	1	2
CUSCO	13	10	74	23	30
HUANCAVELICA	6	5	34	2	7
JUNIN	8	1	51	1	2
LA LIBERTAD	7	3	23	2	7
PUNO	9	8	69	15	30
<b>TOTALS</b>	<b>89</b>	<b>51</b>	<b>468</b>	<b>71</b>	<b>132</b>
<b>% ON E.P. LIST</b>		<b>57%</b>		<b>15%</b>	
<b>CARITAS E.P. DIST. AS % OF TOTAL E.P. DIST</b>					<b>54%</b>

E.P. = Extreme Poverty. The "Extreme Poverty" list used was that attached to Resolucion Ministerial No. 353-95-PRES of 8 September 1995 which approved the directive for the formulation of the plan for the campaign against poverty 1996-2000.

The beneficiaries recognize the importance and benefits of agroforestry procedures. In Cajamarca there are well-managed communal forestry nurseries run by women. Seedlings are provided to target families. Areas in Cajamarca in which conservation practices are carried out are used for producing food for each of the families. In other areas in which conservation is practiced, Mothers' Clubs plant vegetables to help feed their families. "I no longer spend on buying vegetables in the market, now we eat the produce of our own farms."



Although new areas and new crops are being planted, no conclusions could be drawn about productivity in Cajamarca because of extreme weather conditions.

The expansion of the agricultural frontier had an unexpected impact: fewer conflicts caused about property lines. "Now I can sow and take advantage of every corner because I no longer have to fight with my neighbor."

***2. The women participating in CARITAS activities improve their organizational skills, reaching higher levels of social awareness and increasing their self-esteem.***

Average participation includes a significant proportion of women, approximately 50 percent.

Most of the women stated that no changes had occurred in their domestic relationships. Women still assume all domestic chores.

As far as the social acknowledgement of women is concerned, changes were only evident in Cusco. The new secretary of the United Federation of Campesinos of Espinar (FUCAE) has formed the secretariat for the organization of rural women (SOMUC) in most communities. In the FUCAE Congress, more than 50 percent of the delegates were women, and women were elected to the Management Board.

As regards women's self-esteem, it is evident that the project has helped to improve it. The women expressed more confidence in themselves, which they attribute to the collective work with other women and the responsibility assumed on behalf of farmers in general.

***3. Participating families who produce for the market (horticulture, breeding guinea-pigs) improve their food and income.***

This impact was evaluated in Cajamarca and Ayacucho, mainly with women who carry out activities aimed at the market, such as horticulture and small animal breeding. In Cajamarca, 48 percent of the women participate in the program; approximately 65 percent in Ayacucho. The women mentioned that other beneficiaries anxious to learn horticulture have recently joined the program.

In all three towns visited in Ayacucho, each of the mothers' clubs breeds approximately 150 guinea pigs and some rabbits. They also run communal vegetable plots where they sow alfalfa and vegetables. They manage their own compost heaps and worm culture for fertilization purposes. Mothers' clubs have organized a trade circuit in the tourist centers of Huamanga and Quinua. Each organization sells about 30 guinea pigs a month.

Project beneficiaries in Cajamarca declared that a small group of women breadwinners had ventured into horticulture. They were later joined by most of the other women in the settlement. To quote them: "Now women from other towns come to learn from us."

In Cajamarca, beneficiaries claimed to have improved the quantity and quality of their food. They also expressed their knowledge of seasonal price changes and identified the effect of this on their income. In Ayacucho, the women reported that the sale of guinea pigs helps them cover their production costs and obtain profits which they invest in purchasing staple food products (rice, sugar, salt) for members of their organization. The women have developed the capacity for future planning.

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The sustainability of the activities is confirmed by the strong motivation created by the suitability of the project, efficient learning of the technology, and the benefits obtained from improved income, food and standard of living. In Ayacucho, the companionship established is an important element for sustaining existing organizations.

***4. With pacification, the returning population supported by CARITAS is able to settle in their rehabilitated habitat and rebuild their social and productive dynamism.***

The CARITAS activities have contributed to the rebuilding of lives and a productive base in the newly pacified areas. For example, in the community of 300 families in Huambalpa (Ayacucho), all but 45 had left by mid-1994, the year when some began to return. By mid-1995, there were 90 families, and today there are 120. CARITAS has helped to re-establish the health center and the primary school, and to build a community center. A rotating credit fund for seeds and other agricultural inputs has been established. A harvest storage structure has been built.

This re-population process is sustainable. CARITAS responded to the most urgent demands of the population, both quickly and efficiently. It has helped strengthen the local government structure, made the authorities competent, and improved the authorities' ability to appeal to other public institutions to join efforts and rebuild community life.

***5. Families participating in the project adopt the technology promoted, improve the use of resources and their production-productivity.***

In general, CARITAS has promoted four technologies: a) alfalfa as a cultivated pasture grass; b) construction of rustic reservoirs to hold water for cattle during the dry season; c) construction of fencing for the alfalfa plots; and d) construction of greenhouses for family vegetable production. These technologies have been well received by local farmers. The number of families that have adopted at least two of these may reach 30 percent in some communities. Said one farmer, when asked about the apparently high adoption rates: "...because they're [i.e., the technologies] inexpensive and because we receive food."

In Cusco, most of the participating families have adopted Alfalfa WL 318, imported from the United States, for feeding milk cows. It is cut and made into silage for the dry season. The alfalfa is grown on fenced lands (on a communal grazing area, each family fencing in an area), with credit from a rotating fund used to buy the seed. This is the first time alfalfa has been cultivated here (the first time farmers have cultivated a grass at all). The farmers are learning the advantages and dangers of the grass. As one put it, "With this grass the cows give much more milk, but we have to be careful with timpanismo, which can kill the animals. For this reason, it's important to learn to make silage, so they don't eat green alfalfa. Title II food is used to build the fences to keep the animals out of the green alfalfa."

These new technologies are probably sustainable where they have been adopted with success. Whether they can be replicated without the availability of food aid will depend on whether small scale credit facilities can be established.

The growing of vegetables and the work with alfalfa are likely to be sustainable. Women have seen the value of the vegetables to their children's nutrition. According to one woman in Cajamarca: "Look at the children, they're plump, pretty, they no longer get sick; before, over nothing, zas!, the children died." Another element favoring sustainability in Cajamarca is the practice there of including a combination

of collective work in private areas, making the benefits of this collective conservation work compatible with private property rights.

## E. CONCLUSIONS

1. CARITAS/Peru is unable to document its achievements, particularly in relation to any national plan. Without visiting the field, one could easily conclude that the organization is ineffectual. By visiting the field, however, one becomes aware of the real strength of the organization: its de-centralization, its total immersion with the local communities, and its emphasis on developing and strengthening local organizations.
2. As a result of the foregoing factors, the activities carried out reflect the felt needs of the communities and are more likely to respond to the marked agro-ecological and socio-economic diversity in the country, especially in the *sierra*. In addition, activities are usually carried out in a way that promotes local solidarity — e.g., all of the poor share in whatever resources are available, not just the poorest. This solidarity can be very useful in dealing with the emergencies with which Peruvians have had to deal for much too long, especially in the *sierra*.
3. Reflecting the foregoing, CARITAS reaches into the remotest areas of Peru, and the remote areas of the *sierra* is where the greatest poverty occurs. Further, during the years of violence, especially in Ayacucho, CARITAS remained active in the "hot" zones.
4. The limiting side of the CARITAS structure is that the quality of local projects depends very heavily on the knowledge and capabilities of the people in the individual parish or diocese. Not all dioceses will have capable planners and technical experts; thus, implementation may be less effective than it could have been if better planned, or the most appropriate technology may not be considered for implementation.
5. The current CARITAS/Peru effort to improve planning at the local level, using the USAID-developed Logical Framework, is a step in the right direction. Other measures that might help improve the results in the field include the following:
  - ▶ Increase the number of technical cadre in CARITAS/Lima who could serve as: a) on-call technical assistance personnel to help planning efforts; b) monitors and advisors of on-going activities, particularly of demonstrations of new technologies; and c) trainers of local promoters and monitors.
  - ▶ Hold fairly frequent regional technical workshops (*seminarios talleres*) to promote a technical interchange among the field personnel and to introduce any promising new technologies.
6. CARITAS at the diocese level combines resources from several sources to mount its programs — e.g., Catholic Relief Services, CARITAS Switzerland, and the governmental institutions of FONCODES (Community Development Fund) and INADE (Agricultural Development Institute). While this is salutary and can help stretch the impact of Title II resources, it makes it difficult for an evaluation of this kind to sort out the effects of Title II contributions. In such circumstances, one cannot properly speak of a Title II "project."

## V. GENERAL CONCLUSIONS

1. Because of a commitment to service and to a better Peru on the part of their personnel, often in the face of low salaries and always under austere working conditions, the cooperating sponsors have in varying degrees successfully met the challenge of increasing the food security of their constituents over the past six years. It began in the early 1990s with keeping people alive because Peru, unlike other countries (e.g., Bolivia), had no safety net, no emergency fund when it instituted draconian economic and financial measures as part of its structural adjustment. Creating a safety net fell primarily on the agencies being evaluated herein.
2. Apart from the contribution of donated food itself to total family food supply in many impoverished *sierra* communities (a sobering commentary on production levels), all of the projects have enjoyed some success in meeting the mandates of the Title II program in agriculture and rural development:
  - ▶ All have increased the awareness of the need to practice soil conservation. The work of CARE/PRONAMACHCS in particular should be mentioned.
  - ▶ The projects have all increased the capacity of poor farmers to organize themselves, analyze their problems, and take decisions. The work of CARITAS and of the power of the Catholic Church to mobilize resources at the community level in the remotest corners of Peru deserves mention.
  - ▶ The projects have also enjoyed success in stressing the value of certain foods in the diet, especially in the diet of children. Here, one notes the work of ADRA/OFASA, with its integrated family focus and its gains made in introducing foods such as amaranth into the family diet and in sensitizing mothers to the importance of such foods for growing children.
3. All of the cooperating sponsors have some weaknesses in providing technologies appropriate for *sierra* farmers. Few of the rotating credit funds observed are sustainable, and all of the agencies have to some degree used inferior seed. Some of the technologies do not take into account the farmers' financial capabilities and their risk-aversion decision-making processes. In some cases, production has been geared to selling in the market without adequate market analysis. While the agencies can make some improvements in operations, these problems are part of a much larger one: **the Peruvian State does not have the capacity to address the agricultural problems of poor farmers of the *sierra***. This dilemma has four dimensions:
  - ▶ There is no public policy for addressing the agricultural needs of this group.
  - ▶ No public research and extension entities (with the possible exception of PRONAMACHCS) are able to reach this group with appropriate technologies.
  - ▶ No public credit entity is in a position to assist the group.
  - ▶ Limited public capacity exists for seed research and multiplication.

Until these critical deficiencies are remedied, there is no prospect for addressing the agricultural needs of this group adequately over the long term — assuming that the farmers remain farmers, settled where they now are.

On the other hand, addressing the needs of this group responds to three current USAID thrusts:

- ▶ The food security strategy seeks to increase food availability (production) among poor farmers of the *sierra*.
- ▶ Keeping poor farmers in the *sierra* reduces migration to the eastern *selvas* to work coca. Interviews conducted during this evaluation reveal a substantial sporadic migration to the *selva* among residents of project communities.
- ▶ Improving the lives of *sierra* farmers also improves the environment in the *sierra* (e.g., through soil conservation) and in the *selva*, where the coca trade destroys the forests and pollutes the waters.

It seems appropriate, therefore, that USAID (not just the Food for Development office) should work with the Peruvian government, as well as with the cooperating sponsors, to increase and make more effective the support given to the agencies in their agricultural development efforts in the *sierra*.

4. Reaching the poorest of the poor in the Peruvian *sierra* (the current food security mandate) is a high-cost endeavor because the poor tend to be in the remotest, least accessible areas. It is expensive to transport the food to such areas, and costly to maintain secure warehouses in such areas (USAID is concerned with the security of the food as well as with food security). Hence, two scenarios seem likely: (a) USAID and the agencies have to find new ways to deal with the problems, and increased food monetization will probably be necessary to support these new approaches; and/or (b) a decision will be made to forego trying to reach the most remote and concentrate on supporting the movement of people from the most remote areas to magnet urban centers as currently is being planned by the Office of the Presidencia.
5. There is a great potential for the use of greenhouses in the high-elevation zones of the country where inclement weather can ravage open-air crops. Greenhouses can be helpful in improving the family diet, especially with the production of vegetables. Agencies should be mindful of certain caveats when drafting a strategy for greenhouses: (a) working large houses collectively may not be viable in some communities — even when farmers have individual plots within the greenhouses, the structures must be maintained and operated collectively; (b) the first consideration in a greenhouse strategy should be improvement of the family diet — marketing considerations should be a secondary concern. Marketing may be viable in some places.
6. All of the agencies have worked with women, often in a massive way. This work has not only imparted knowledge to women (the production of vegetables, for example), but has given them experience in organizing and taking decisions. In this it has helped them gain self-confidence and self-esteem. Yet, this relatively untapped resource could help make projects more effective if the agencies had a "gender policy" which would require that: (a) women be part of the design of projects and project activities; and (b) women be represented in important project/activity decision-making bodies, especially at local levels (i.e., where

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projects operate). To help make this policy effective, the agencies should consider leadership training such as been provided through some comedor activities and through Mothers' Clubs.

7. Since hybrids are not available and are costly, and since they degenerate quickly, the projects should focus on selecting and improving local seed. The latter tolerates local climatic phenomena better.
8. In agricultural interventions, attention should first be given to improving the family diet directly (rather than through market sales of agricultural produce). It appears that family gardens, rather than community gardens, may also be more culturally acceptable. Crops of great value in improving local diets are the Andean grains (amaranth and quinoa) and vegetables. The strategy followed by ADRA is sound in this regard; in parts of Ayacucho, ADRA is successfully integrating amaranth (kiwicha) into the diet of young children.

## VI. RECOMMENDATIONS

1. **USAID should work with the cooperating sponsors to develop a strategy with two parts to reach poor *sierra* farmers with appropriate technologies: (a) the institution of a process to make technologies appropriate; and (b) the establishment of links to technology sources.**

The Farming Systems approach to research and extension (i.e., adaptive research) would provide the process, while the technology sources would vary — International Potato Center (CIP) for potatoes and the Agrarian University at La Molina for grains. CIP also has much valuable experience with the systems approach. An agency-CIP link would thus provide process and tuber technologies.

2. **As a first step to establishing these links, and to facilitating the sharing of experiences of the agencies with each other, USAID should sponsor a seminar-workshop in which each agency would discuss its methods, challenges, and problems regarding technology generation and extension.**

CIP could present the farming systems approach and explain what the approach might offer the agencies, and what CIP has to offer them.

3. **USAID should consider organizing a seminar-workshop, similar to the technology workshop, on agricultural credit, with special emphasis on rotating credit funds.**

**ATTACHMENT 1**  
**AGRICULTURAL DEVELOPMENT - ADRA**

DETAIL	YEAR 90		YEAR 91		YEAR 92		YEAR 93		YEAR 94		YEAR 95	
	No. PROJECT	HAS	No. PROJECT	HAS	No. PROJECT	HAS	No. PROJECT	HAS	No. PROJECT	HAS	No. PROJECT	HAS
<u>AGRICULTURAL CROPS</u>												
PLAN A	42	61.6	34	93.4								
PLAN B	150	630.7	99	515.0								
<u>COMMUNITY GARDENS</u>												
PLAN A	46	5.7	9	2.7								
PLAN B	24	3.0	67	19.1								
<u>REFORESTATION</u>												
PLAN A			1	0.3								
PLAN B			17	6.4								
PLAN C	9	30.5	20	32.6								
<u>ORCHARDS</u>												
PLAN C			2	2.5								
<u>I. STORAGE INFRASTRUCTURE</u>												
<u>IRRIGATION CANAL CONSTRUCTION</u>												
IRRIGATION CANAL REHABILITATION					317 kms.			2,000 m.				
RESERVOIR CONSTRUCTION					80 kms.			20,500 m.				
WATER-TANK CONSTRUCTION					4462 m.							
<u>II. STORAGE INFRASTRUCTURE</u>					576							
<u>WAREHOUSE CONSTRUCTION</u>												
<u>III. SOIL CONSERVATION INFRASTRUCTURE</u>					50			335 MT				
TERRACE CONSTRUCTION (andenes)					150 has.							
TERRACE REHABILITATION					37 has.							
WARU WARU CONSTRUCTION					28 has.							
GREENHOUSES								253 m.				
LAND LEVELING					19 has.							
FORESTRY NURSERY								56,500 pl.				
ROAD CONSTRUCTION								2,500 m.				
ROAD REHABILITATION								37,500 m.				
<u>IV. LIVESTOCK INFRASTRUCTURE</u>												
<u>WATERING PLACE CONSTRUCTION</u>												
CATTLE MODULE					23							
					1							
<u>CROPS</u>												
POTATO									338.2			393.2
WHEAT									101.2			18.0
PEA									35.9			23.0
BARLEY									46.1			87.0
OATS									8.0			36.2
BROAD BEANS									43.8			57.0
MAIZE									32.9			31.3
QUINOA									15.5			5.0
AMARANTH												5.0

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**ATTACHMENT 2**  
**CARE - RURAL DEVELOPMENT**  
**GOALS ACHIEVED IN THE PERIOD OCTOBER 1992 - SEPTEMBER 1995**  
**PROJECT ALTURA — NATIONAL CONSOLIDATION**

CATEGORY		PERIOD OCT '92 - SEP '95
		TOTAL
<b>1</b>	<b>PROJECT OPERATIVE UNITS</b>	
	1.1 No. of Participating Operative Units	508.00
	1.2 No. of Retired/Disqualified Operative Units	69.00
	1.3 No. of Operative Units Graduated	76.00
<b>2</b>	<b>FAMILIES PARTICIPATING IN THE PROJECT</b>	
	2.1 Total of Families participating in 1 or more activities of the project	24,052.00
	2.2 No. of Men participants	14,728.00
	2.3 No. of women participants	9,290.00
	2.4 No. of Child participants	1,401.00
<b>3</b>	<b>SOIL CONSERVATION</b>	
	3.1 Slow formation terraces (Has.)	3,930.85
	3.2 Banked Terraces (Has.)	578.31
	3.3 Contour infiltration ditches (has)	1,780.57
	3.4 Terrace rehabilitation (Has)	189.82
	3.5 Ditch Control (Has.)	59.55
<b>4</b>	<b>FOREST PLANTATIONS</b>	
	4.1 No. of communal nurseries	5,768.00
	4.2 No. of family nurseries	7,486.00
	4.3 Seedling Production	13,273,334.00
	4.4 Agroforestry plantations (Has.)	10,217.43
	4.5 Agroforestry plantations (No. of trees)	6,421,817.00
	4.6 Massive plantations (Has.)	3,767.23
	4.7 Massive plantations (No. of trees)	4,380,469.00
	4.8 Protection/management of Agroforestry plantations	770.00
	4.9 Protection/management of massive plantations	322.50
	4.10 Fruit tree plantations (Has.)	620.89
	4.11 Fruit tree plantations (No. of trees)	366,440.00
<b>5</b>	<b>CROP PRODUCTION</b>	
	5.1 Seeded area (m2)	527,404.21
	5.2 Area seeded with annual crops (Has.)	1,845.38
	5.3 Revolving Seed Fund functioning (No.)	377.00
<b>6</b>	<b>FOOD DISTRIBUTION</b>	
	6.1 Food distributed (kg)	6,209,194.00
	6.2 No. of beneficiaries (heads of household)	180,825.00
<b>7</b>	<b>SEEDS DISTRIBUTED</b>	
	7.1 Seeds distributed (kg)	6,684.56
	7.2 No. of Operative units that received seeds	1,422.00
	7.3 No. of families that received seeds	32,697.00
<b>8</b>	<b>SEMILLAS DE CULTIVOS ANUALES DISTRIBUIDAS</b>	
	8.1 Semillas de Cultivos Anuales Distribuidas (Kg.)	672,589.69
	8.2 Nro.de Unidades Operat.que recib. semillas de Cult. anuales	910.00
	8.3 Nro.de Familias que recibieron semillas de Cultivos anuales	25,304.00
<b>9</b>	<b>MOTORCYCLES GIVEN TO COUNTERPARTS</b>	
	9.1 No. of motorcycles donated	25.00
	9.2 No. of motorcycles lent	49.00
	9.3 No. of Motorcycles stolen/lost	3.00
<b>10</b>	<b>TRAINING EVENTS</b>	
	10.1 For project professional staff (No. of events)	41.00
	10.2 For Extensionists (no. of events)	120.00
	10.3 For community promoters (no. of events)	596.00
	10.4 For leaders of the operative units (no. of events)	510.00
	10.5 For participating families (no. of events)	3,904.00
<b>11</b>	<b>PERSONNEL TRAINED</b>	
	11.1 No. of Extensionists trained	801.00
	11.2 No. of Community promoters trained	6,914.00

Instituto de Investigación Nutricional / PL480 90-95



**ATTACHMENT 3**  
**PRODUCTIVE INFRASTRUCTURE PROJECTS**  
**CARITAS**

TYPE OF INFRASTRUCTURE	1991		1992		1993		1994		1995		TOTAL PROJECTS
	No. OF PROJECTS	TOTAL UNITS	No. OF PROJECTS	TOTAL UNITS	No. OF PROJECTS	TOTAL UNITS	No. OF PROJECTS	TOTAL UNITS	No. OF PROJECTS	TOTAL UNITS	
AGRICULTURE			709	2660.85 jornales							
Construction of irrigation canals					367	721 km.	373	264 km.	230	545 km.	740
Improvement of irrigation canals					11	126 km.	8	10 km.	3	30 km.	19
Construction of water intake for canals	186	581 km.			4	2200 units	2	2,650 m.	2	675 m.	192
Construction of terraces	10	21.5 has.			92	366 has.	57	45 has.	44	38 has.	159
Reconstruction of terraces					7	71 ha.	6	3 has.	14	5 has.	13
Watering-places for livestock	1	40 m.			35	1960 m.	18	239 m.	9	121 m.	54
Production units for small animals	47	4,297 units			64	52504 m.	96	188,289 m.	87	3,200 m.	207
River defenses					8	3200 m.	16	6,480 m.	4	32,830 m.	24
Nurseries	7	n/d			18	109,426 m.	30	240,775 m.	91	243 has.	55
Reforestation	14	332 has.			136	129 has.	132	54 has.	126	1436 has.	282
Agroforestry					0		0		32	24 has.	
Seedling production units					322	248 has.	382	252 has.	162	16 has.	704
Soil improvement	5	33 has.			42	191,058 has.	56	45 has.	67	96,871 m.	103
Infiltration ditches					2	850 m.	5	1,602 m.	35	1,020 m.	7
Wells	10	233 m.			15	1585 m.	26	1,823 m.	3	37,947 m.	51
Reservoirs	76	15,887 m.			106	399,566 m.	104	54,108 m.	44	81 m.	286
Production of worm humus					0		2	24 TM.	2	15 has.	2
Seed production units					0		0		4		
Diffuse light potato warehouses					0		15	19.38 m.	0	6,102 m.	15
Construction of fishfarm					6	921 m.	9	60,760 m.	5		15
Terraces	15	10.27 has.									15
Gardens	424	233.97 has.									424
Construction of animal farms	7	730 m.									7

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ANNEX E

MALNUTRITION AND CHILD MORTALITY ARTICLE

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# *Malnutrition and Child Mortality:*

## PROGRAM IMPLICATIONS OF NEW EVIDENCE

### **Introduction**

Nutrition interventions generally target severely malnourished children. The high costs for treatment and rehabilitation of these children leave few resources to address less severe malnutrition problems.

A recent analysis of 28 epidemiologic studies published by Dr. David Pelletier and colleagues<sup>1</sup> at Cornell University, however, indicates that mild and moderate malnutrition pose far greater risks to child mortality than previously documented. These findings strongly suggest that interventions to prevent malnutrition in children will increase the overall effectiveness of child survival programs.

Because malnutrition increases a child's risk of dying from many diseases—most prominently measles, pneumonia, and diarrhea—programs to prevent malnutrition can reduce mortality from several diseases simultaneously. Efforts to promote even modest nutritional improvements such as small changes in feeding behavior will have a beneficial impact on mortality rates over time.

Major research findings are summarized below, followed by a brief discussion of their implications for child survival programs. Based on several decades of experience in nutrition programming, recommendations are made for specific activities to promote optimum growth in infants and young children.

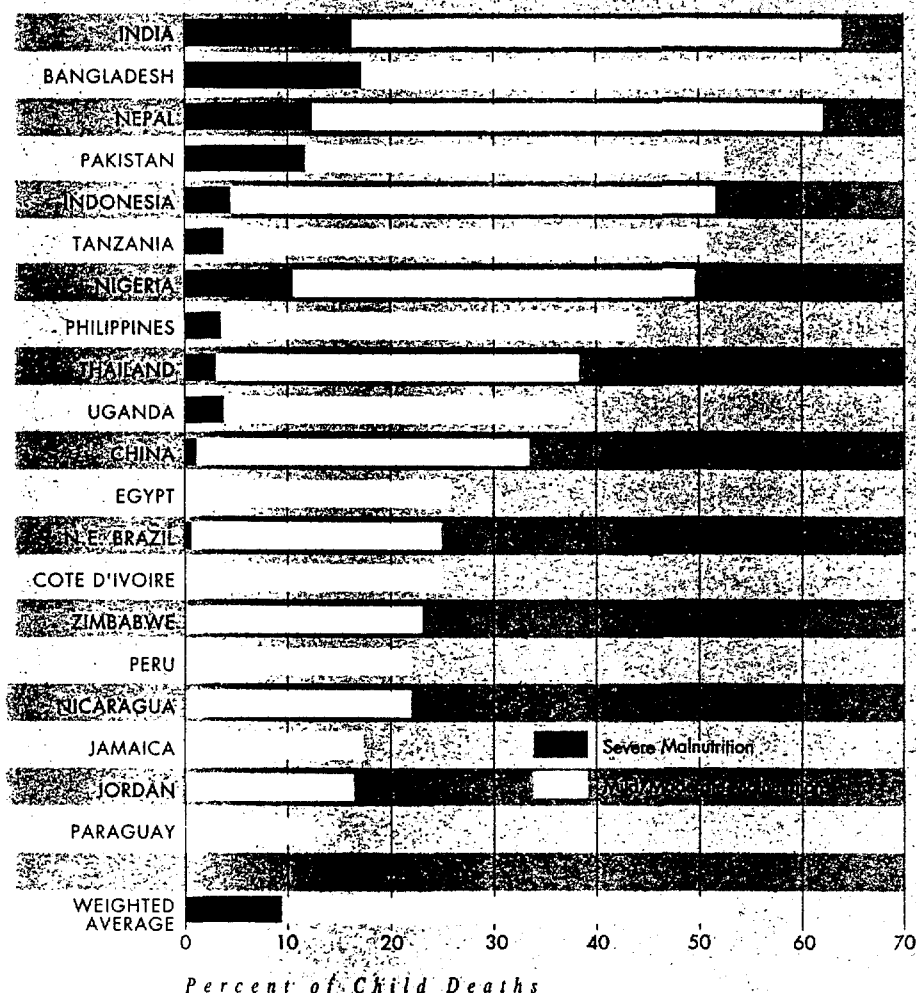
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*This research update is a collaboration among the Basic Support for Institutionalizing Child Survival (BASICS) Project, the Nutrition Communications Project (NCP), and the Health and Human Resources Analysis for Africa Project (HHRAA/SARA), with support from the U.S. Agency for International Development.*



FIGURE 1

**Deaths due to the underlying effects of malnutrition on infectious diseases**



Source: Pelletier DL. *Bulletin of the World Health Organization*, 1995; 73 (in press).

## Research Findings

### 1. Malnutrition contributes to more than half of child deaths worldwide.

Fifty-six percent of deaths among pre-school children<sup>2</sup> in the developing world are due to the underlying effects of malnutrition on disease. Conventional methods of classifying deaths by cause have misleadingly attributed only about five percent of child deaths to malnutrition.

### 2. The risk of death rises increasingly among children who are mildly, moderately, and severely malnourished.

Previous research suggested that only severely malnourished children were at increased risk of dying, implying that interventions should be focused solely on reaching these children. The new analysis demonstrates that the relationship between malnutrition and mortality is ubiquitous. Even mildly and moderately malnourished children are at increased risk of death because of their poor nutritional status.

On average, a child who is severely underweight<sup>3</sup> is 8.4 times more likely to die from infectious diseases than a well-nourished child. Children who are moderately underweight and mildly underweight are 4.6 and 2.5 times respectively more likely to die than well-nourished children.

### 3. Most malnutrition-related deaths occur in children who are mildly and moderately underweight.

Although the risk of death is greater for severely underweight children, these extreme

cases make up only a small fraction of the total number of children suffering from malnutrition and at increased risk of dying. In fact, the analysis estimates that the vast majority—83 percent—of all malnutrition-related deaths worldwide occur in children who are mildly and moderately underweight (see Figure 1). Programs directed only at treating severe malnutrition, therefore, will have only a minor impact on child mortality rates.

#### **4. The synergistic contribution of malnutrition to child mortality is consistent across populations and can be estimated at the country level.**

The analysis shows that the quantitative relationship between malnutrition and mortality is remarkably consistent across various populations representing diverse ecologic, disease, and cultural environments. The child deaths synergistically attributable to malnutrition can be estimated for countries with nationally representative weight-for-age data. In Figure 2, the number of child deaths attributable to malnutrition can be estimated by locating where the prevalence of all levels of malnutrition (below 80 percent of the NCHS median) crosses the line.

The percentage of all malnutrition-related deaths that occur in mildly and moderately malnourished children can also be estimated from weight-for-age prevalence data.<sup>4</sup>

### **Program Implications from the Research Data**

These recent analyses quantify the effects of malnutrition on child mortality. Three compelling conclusions from this research are particularly important for improved child survival programming:

- Mild and moderate malnutrition are implicated in many more child deaths than previously recognized.
- The effectiveness of child survival programs will be increased by interventions that include the prevention of mild and moderate malnutrition.
- The largest reductions in child deaths are likely to be achieved by: (1) targeting populations with the highest rates of child mortality, and (2) simultaneously improving both health and nutritional status in children.

These program implications suggest that actions to promote positive behavior changes should be included in community prevention programs and at prenatal, well-child, and sick-child visits to health facilities.

### **Program Recommendations**

The wealth of experience in nutrition programs over the last two decades offers a variety of lessons for developing integrated programs to reduce child mortality and improve early

childhood growth and development. These lessons and best practices are summarized below.

### **1. Promotion of appropriate infant and young child feeding practices from birth through the first two years of life**

Programs to promote appropriate feeding practices of infants and young children stress what families themselves can do with their available resources to improve the nutritional well-being of their children, including optimal breastfeeding and improved complementary feeding practices.

Optimal breastfeeding begins with exclusive breastfeeding, starting at the time of birth and continuing for up to six months. Experience has demonstrated that the following strategies are effective for increasing the practice of exclusive breastfeeding. These include training, communications, and social marketing efforts to:

- Create hospital and birthing environments that are conducive to immediate and optimal breastfeeding practices.
- Encourage peer support groups for newly breastfeeding women.
- Focus on delaying the introduction of non-breast milk liquids into the diets of young infants.
- Enhance women's confidence in their breast milk production and its ability to satisfy their infants' hunger and nutritional needs.

Improved complementary feeding practices should begin at six months of age when mothers move from exclusive breastfeeding to introducing locally available solid foods. Experience has shown that training, communications, and social marketing efforts are successful in promoting the following actions:

- Increase the nutrient density and quality of traditional weaning foods by adding oil, sugar, groundnuts, and/or appropriate animal products and vitamin-rich fruits and vegetables at six months. —
- Increase the variety of foods and snacks offered to infants after nine months.
- Increase the frequency of feeding solid foods and snacks to four or five times daily by 12 months.
- Encourage mothers and caretakers to take an active role in feeding by providing them with strategies for feeding children with poor appetites and monitoring the quantity of food they consume.
- Encourage appropriate hygiene-related practices. These practices include hand washing and serving all foods immediately after preparation to reduce the possibility of contamination.
- Continue breastfeeding through at least 24 months of age.

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Although the selection of specific behaviors and strategies to emphasize will vary in different settings, experiences from many countries suggest that mothers—even under the most difficult conditions—are willing to introduce or continue these positive feeding practices if they perceive benefits for themselves and their children. These benefits need to be actively communicated by all programs.

## 2. Proper nutritional management of childhood illnesses and increased feeding during recuperation from acute infections

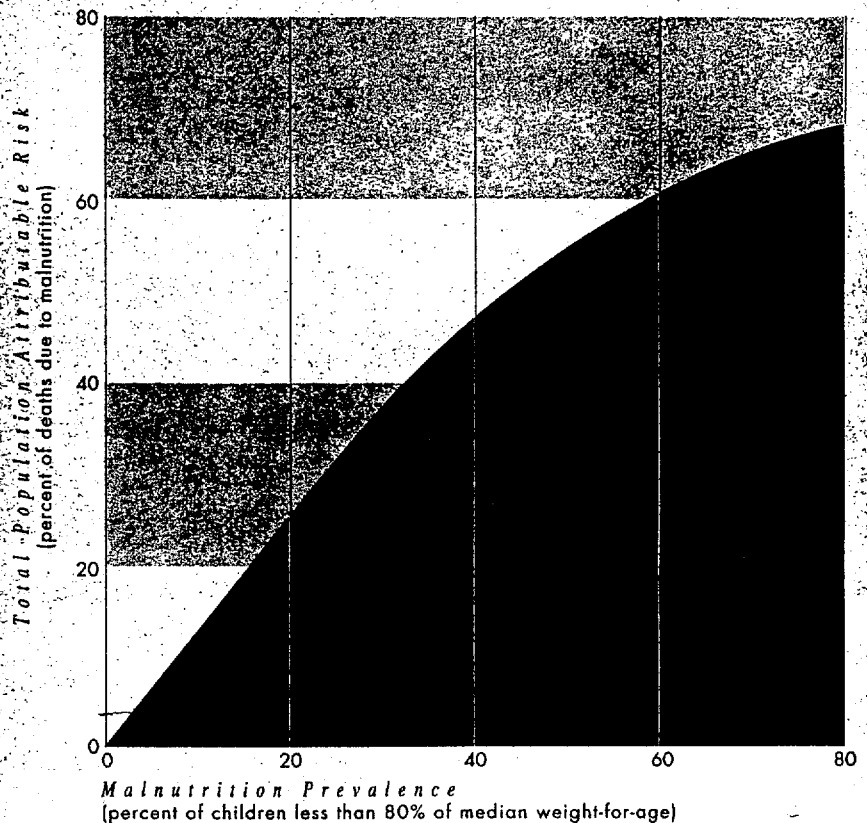
Past experience has demonstrated the feasibility of implementing these feeding behaviors to reduce the nutritional consequences of infection:

- Continue breastfeeding during all illnesses.
- When possible, continue feeding solid foods and actively encourage children to eat.
- Increase feeding during recuperation periods as soon as children are willing and able to eat and continue increased feeding for as long as possible.

Appropriate nutritional management of childhood illness is addressed in the WHO/UNICEF approach to the integrated case management of the sick child. This protocol includes assessment, treatment, counseling, and follow-up of several conditions affecting nutrition and child growth. The protocol recommends these actions:

FIGURE 2

### Percent of deaths in children less than 5 that are attributable to malnutrition



Formula: Total Population Attributable Risk (PAR) =  $0.87 + 1.42X - 0.0075X^2$   
 where X is Malnutrition Prevalence (percent under 80% of median weight-for-age)  
 Source: Pelletier, D. et al. *Bulletin of the World Health Organization*, 1995; 73 (in press)

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- Give vitamin A supplements to children with measles.
- Provide iron tablets to children with signs of anemia.
- Weigh sick children and assess their nutritional status and feeding routines.
- Provide feeding advice tailored to local conditions to mothers with malnourished children or children who are experiencing feeding difficulties.

### **3. Promotion of appropriate dietary practices and micronutrient supplements among women of reproductive age**

Malnutrition is an intergenerational phenomenon. The growth and development of young children are affected by their mothers' past nutritional history and their well-being during pregnancy. Weight-for-age in infancy is highly correlated with birth weight, which itself is affected by maternal health and nutrition. In light of these relationships and the relationship between weight-for-age and child mortality, programs should include interventions to improve the nutrition of women as a means of preventing childhood malnutrition and early death.

Although program experience in this area is more limited, the following strategies are recommended:

- Increase the micronutrient stores of girls and women before pregnancy, especially iron, iodine, and vitamin A.
- Delay first pregnancies and increase intervals between births.
- Provide adequate care during pregnancy, including appropriate treatment for malaria, sexually transmitted diseases and other infections that affect fetal growth and development.
- Increase protein and energy consumption and improve the quality of women's diets during pregnancy and lactation.
- Introduce labor- and time-saving technologies to reduce energy expenditure during pregnancy.
- Provide iron supplements during pregnancy and vitamin A supplements to mothers within the first month after birth in areas where vitamin A deficiency is common.

### **Conclusion**

These research findings indicate that child survival programs must directly address the increased risks created by malnutrition—even mild and moderate malnutrition—in the populations they serve. Although disease-centered treatment and prevention programs can positively affect nutritional status, preventing malnutrition in children is essential to reduce significantly child mortality.

By emphasizing what families can do for themselves—especially through optimal breastfeeding and complementary feeding practices—international assistance programs can take a leadership role in reducing child

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mortality caused in part by malnutrition. While the specific strategies for reducing malnutrition will vary in different settings, the commitment to address nutritional problems must not.

## Endnotes

<sup>1</sup> This research is published in: (1) Pelletier D.L., Frongillo E.A. Jr, Schroeder D.G., Habicht J-P. The effects of malnutrition on child mortality in developing countries. *Bulletin of the World Health Organization*, 73 (in press), 1995. (2) Pelletier D.L. The relationship between child anthropometry and mortality in developing countries: implications for policy, programs and future research. *The Journal of Nutrition*, Supplement, 124 (10S):2047S-2018S, 1994. (3) Pelletier D.L., Frongillo E.A. Jr, Schroeder D.G., Habicht J-P. A methodology for estimating the contribution of malnutrition to child mortality in developing countries. *The Journal of Nutrition*, Supplement, 124(10S):2106S-2122S, 1994. (4) Pelletier D.L., Frongillo E.A. Jr., and Habicht J-P. Epidemiological evidence for a potentiating effect of malnutrition on child mortality. *American Journal of Public Health*, 83:1130-1133, 1993.

<sup>2</sup> Pelletier's results are based on studies of children of different age ranges up to five years, but only one of the studies includes children under six months. Thus, the results are most secure in children aged 6-59 months, and they are least applicable to the neonatal period.

<sup>3</sup> The definitions of mild, moderate and severe malnutrition used by Pelletier *et.al.* are based on percent of median weight-for-age. Approximate relationships between percent of National Center for Health Statistics (NCHS) median weight-for-age and Z-scores are shown below:

Underweight category	Percent of NCHS median weight-for-age	Z-score range
mild	70 - 79%	-2.0 to -3.0
moderate	60 - 69%	-3.0 to -4.0
severe	less than 60%	less than -4.0

More exact formulas to convert Z-score data to percent of NCHS median weight-for-age can be found in Pelletier D.L., *et.al.*, *J. Nutrition*, 124(10S):2106S-2122S, 1994.

<sup>4</sup> The percentage of all malnutrition-related deaths that occur in mildly and moderately malnourished children (percent MMM) can be estimated for a country using the following formula: percent MMM =  $99.2 - 9.02X + 0.8058X^2$  where X is the percent of children below 60 percent of the NCHS median weight-for-age (severely malnourished).